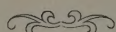


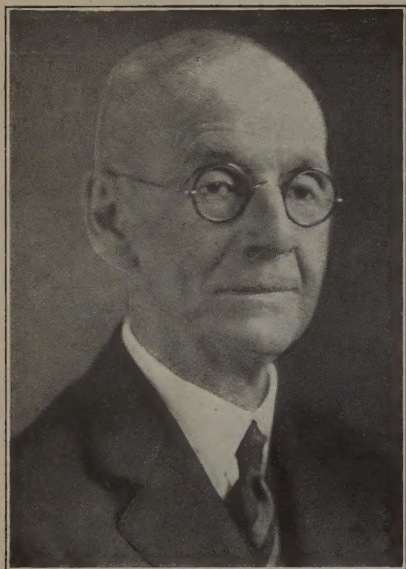
The North Central Association Quarterly



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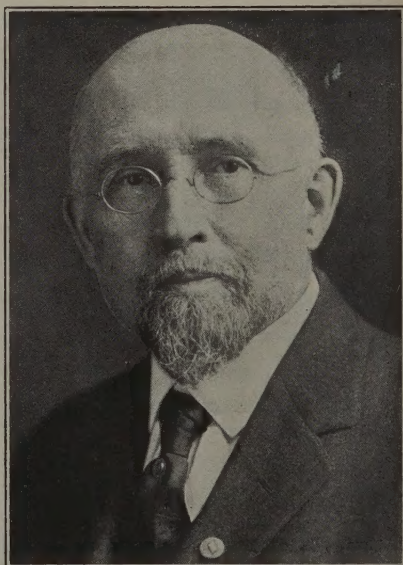
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ALLEN S. WHITNEY, LL. D.

Dean, School of Education and Professor of Educational Administration, University of Michigan.

First Chairman of the Board of Inspectors
(Since styled Commission on Secondary Schools),
1900-1910



HORACE A. HOLLISTER, A. M.

Professor of Education and High School Visitor,
University of Illinois, Urbana.

Chairman, North Central Association Board of
Inspectors, 1910-1915,
and active in Association work since 1902.

THE North Central Association QUARTERLY

Vol. I

DECEMBER, 1926

No. 3

News Notes and Editorial Comments

Our Gallery

This month we present the likenesses of two of the "old war horses" of the Association—Dean Allen S. Whitney, LL.D., and Professor Horace A. Hollister, A. M. Very much of the present power, policy and character of the North Central Association is traceable to the exertions and fighting qualities of these two men. When the Association was young and the Board of Inspectors (now called Commission on Secondary Schools) was the chief unit in the Association, these two men shaped thought and action probably as no two others have ever done. Both stood for the establishment and the enforcement of high standards for accrediting secondary schools; both believed devoutly in the purpose and mission of the Association; and both had the vision, courage and power to translate theory into efficient practice. The Association owes deep debts of gratitude to these two men.

Dean Allen S. Whitney is a son of the state of Michigan. After graduating from the University of Michigan he was superintendent of schools in Mount Clemens, and Saginaw, Michigan, for nearly twenty-five years. In 1899 he became professor of education at the University of Michigan and when, in 1921,

the department of education was transformed into a separate school of education, Professor Whitney became the first dean of the new school.

Almost from the outset of his connection with the University, Dr. Whitney became intimately related to the North Central Association. Until within the last few years, he never missed an annual meeting of the society. For ten years he was chairman of the board of inspectors and in this capacity exerted his greatest influence upon the work of the Association. As chairman of a sub-committee on High School Inspectors, appointed in 1901, he formulated the first set of standards which the Association ever had for accrediting secondary schools and brought in a plan whereby schools should be accredited and the list of such schools published.

Professor Horace A. Hollister was born and educated in Iowa and, like Dean Whitney, has been engaged in school work all his life. For twenty-five years he was a teacher and administrator in various schools in Iowa, Kansas and Missouri, being called to the University of Illinois in 1902 as high school visitor. Since that date, therefore, Professor Hollister has been intimately connected with the North Central Association, nev-

er, it is believed, having missed a single annual meeting of the society during that time. For five years (1910-1915), he was chairman of the board of inspectors for the North Central Association and since that date has been chairman of the Illinois committee before the Association's commission on Secondary Schools. Scarcely a meeting of the Association occurs in which Professor Hollister is not found participating in the discussions, and time and again he has, by his wisdom and geniality, guided thought and action out of the mazes of darkness and near-bitterness into realms of light and laughter.

The Association will miss mightily the presence and influence of Dean Whitney and of Professor Hollister when the day comes that they can no longer be actively connected with the organization. May this time be far distant!

Freshmen Failures in College

In the September issue of the Quarterly appeared a committee report prepared by Dean C. R. Maxwell and relating to the success and failure of high school students who entered college in the autumn of 1924.

The Association, last March, continued the committee and requested it to make a follow-up study of the conditions found in typical institutions. Recently the committee formulated and sent out the following letter. It explains the present scheme of procedure and indicates what the Association may hope to have discussed at its meeting next March.

President -----

State University of -----

My dear Sir:

As chairman of a committee on special studies of the North Central Association, an investigation was made during the

past year of the records of the graduates from North Central high schools of June 1924 in their first term's or semester's work in college. We studied the records of 32724 students attending 659 institutions. The study showed a great variation in the percentage of failures in institutions of higher learning. After the report was given at the meeting of the North Central Association in Chicago, the committee was instructed to make a follow-up study of conditions in a few typical institutions.

The committee has decided to select a few institutions in each of the following three groups: state universities, universities and colleges on private foundations, and normal schools or teachers colleges where the variation from the norm is greatest. We trust the institutions selected will cooperate in this follow-up study.

The committee wishes to study the problem from three points of view. First, we should wish to have the institutions in this study use the same intelligence tests, aptitude tests, and possibly achievement tests to find out the status of students in these institutions. In the second place, we should like to find what is done in the study of the personnel problems with the entering class. In the third place, we should like to find out the training and experience of the faculty members that teach freshmen classes. Could your institution give the same intelligence and aptitude tests as are used in the other institutions that we wish to study? Would you be willing to furnish us rather detailed information as to the means that you use in assisting freshmen students to adapt and adjust themselves to their new environment? Could you supply us with information as to the training, experience, and methods of selecting the instructors who teach freshmen classes in your institution?

The committee appreciates that undoubtedly your institution has made similar studies of its own. We feel, however, that a comparison of such studies would be of great value to the institutions belonging to the North Central Association.

C. R. MAXWELL,

Chairman, Committee on Special Studies, North Central Association.

The Honor Roll

The North Central Association was organized in 1895. Since its first meeting it has been the policy to elect a president for but a single year, but to continue in office the secretary and the treasurer for longer periods. Consequently, since 1895, there have been thirty-two presidents of the Association and but relatively few different secretaries and treasurers. The ones who have occupied these distinctive offices do therefore constitute an honored group. We present herewith this complete Honor Roll.

ASSOCIATION PRESIDENTS

TITLE	NAME	POSITION	YEAR
President—	J. B. Angell		
	University of Michigan,		1895
President—	C. K. Adams		
	University of Wisconsin,		1896
President—	J. H. Canfield		
	University of Ohio,		1897
Superintendent—	A. F. Nightingale		
	Chicago,		1898
President—	W. F. Slocum		
	Colorado College,		1899
Superintendent—	G. B. Aiton		
	Minneapolis,		1900
Chancellor—	S. W. Chaplin		
	Washington University,		1901
Director—	G. N. Carman		
	Lewis Institute,		1902
President—	A. S. Draper		
	University of Illinois,		1903
Principal—	F. L. Bliss		
	Jackson, Michigan,		1904
President—	G. E. MacLean		
	University of Iowa,		1905

Principal—	E. L. Harris		
	Cleveland,		1906
President—	E. J. James		
	University of Illinois,		1907
Principal—	E. W. Coy		
	Cincinnati,		1908
Professor—	C. N. Woodward		
	Washington University,		1909
Principal—	G. W. Benton		
	Indianapolis,		1910
President—	H. P. Judson		
	University of Chicago,		1911
Superintendent—	W. J. S. Bryan		
	St. Louis,		1912
Professor—	F. N. Scott		
	University of Michigan,		1913
Principal—	J. E. Armstrong		
	Chicago,		1914
Dean—	T. H. Clark		
	University of Illinois,		1915
Principal—	Chester B. Curtis		
	St. Louis,		1916
President—	Thomas F. Holgate		
	Northwestern University,		1917
Principal—	George Buck		
	Indianapolis,		1918
President—	G. L. Mackintosh		
	Wabash College,		1919
Principal—	George E. Marshall		
	Davenport,		1920
President—	Lotus D. Coffman		
	University of Minnesota,		1921
Principal—	Milo H. Stuart		
	Indianapolis,		1922
Director—	Charles H. Judd		
	University of Chicago,		1923
Principal—	E. L. Miller		
	Detroit,		1924
President—	H. M. Gage		
	Coe College,		1925
Professor—	J. D. Elliff		
	University of Missouri,		1926

ASSOCIATION SECRETARIES

TITLE	NAME	POSITION	YEAR
Principal—	F. L. Bliss		
	Jackson, Michigan,		1895-1898
Professor—	C. A. Waldo		
	Purdue University,		1898-1900
Professor—	F. N. Scott		
	University of Michigan,		1900-1902
Professor—	J. V. Denney		
	Ohio State University,		1902-1906
Dean—	T. A. Clark		
	University of Illinois,		1906-1915
Principal—	H. E. Brown		
	Kenilworth, Illinois,		1915-1919
President—	H. M. Gage		
	Coe College,		1919-1925
Professor—	J. B. Edmonson		
	University of Michigan,		1925-

ASSOCIATION TREASURERS

Director—	G. N. Carman		
	Lewis Institute,		1895-1901
Principal—	J. E. Armstrong		
	Chicago,		1901-1914

Principal—M. H. Stuart

Indianapolis, 1914-1922

Principal—W. I. Early

Sioux Falls, S. Dak. 1922-

Individual Memberships

In the early days of the Association the small incidental expenses connected with the annual meeting were met by assessments upon the individuals present. Later, when a more complete organization was effected, institutional membership became the conspicuous feature of the Association and the head of the institution accredited or otherwise recognized became the official representative of the school or college, with full voting privileges. However, in order that the Association might not be deprived of the counsel and judgments of other educational leaders, not heads of institutions, individual memberships were provided. At one time there was quite a list of these members. Death, removal from North Central Association territory, and failure to pay the annual dues gradually reduced the number of individual members to a small group. Later the Association adopted the policy of not electing to individual membership any one who was entitled to Association privileges by virtue of his institutional connections. Finally, a year or so ago, the Association voted that all individuals who at that time were in good and regular standing should be elected to honorary life membership, be entitled to share all privileges of the Association and be forever thereafter exempted from the payment of dues of any sort. Today there are twenty-six such life members. They are as follows:

J. E. Armstrong, 10638 Prospect Avenue, Chicago, Illinois.

George W. Benton, American Book Company, 100 Washington Square, New York City.

F. G. Blair, Superintendent Public Instruction, Springfield, Illinois.

Otis W. Caldwell, The Lincoln School, 646 Park Avenue, New York City.

N. P. Colwell, Secretary, Council on Medical Education and Hospitals, 535 North Dearborn Street, Chicago, Illinois.

Calvin O. Davis, University of Michigan, Ann Arbor, Michigan.

Joseph V. Denney, Ohio State University, Columbus, Ohio.

J. D. Elliff, University of Missouri, Columbia, Missouri.

W. A. Greeson, Superintendent Emeritus, Grand Rapids, Michigan.

John C. Hanna, Supervisor of High Schools, Springfield, Illinois.

Thomas Holgate, Northwestern University, Evanston, Illinois.

W. H. Johnson, University of Kansas, Lawrence, Kansas.

Thomas Lloyd Jones, University of Wisconsin, Madison, Wisconsin.

John R. Kirk, President, State Teachers' College, Kirksville, Missouri.

Mary A. Malloy, Dean, College of St. Teresa, Winona, Minnesota.

Daniel J. McHugh, DePaul University, 1010 Webster Avenue, Chicago, Illinois.

C. L. Mees, The Walden, Terre Haute, Indiana.

Frank Mossman, President, Morningside College, Sioux City, Iowa.

Mother Mary Samuel, St. Clara College, Sinsinawa, Wisconsin.

Andrew Russel, Office of Public Instruction, Springfield, Illinois.

John L. Seaton, College Secretary, 150 Fifth Avenue, New York City.

Raymond Shoop, Department of Voca-

tional Education, Jefferson City, Missouri.

Miss Marion Talbot, University of Chicago, Chicago, Illinois.

W. O. Thompson, President-Emeritus, Ohio State University, Columbus, Ohio.

Samuel Quigley, President, Western State College of Colorado, Gunnison, Colorado.

A. L. Whittenburg, Secretary, Office Supt. Public Instruction, Springfield, Illinois.

An Explanation and an Apology

This issue of the Quarterly contains a disproportionate number of articles written by individuals resident of Michigan. Several are by the Editor in Chief himself. These doings are not by design. The truth is that insistent appeals to various members of the Editorial Board and to other members of the Association brought few manuscripts. Obviously, however, a magazine cannot be published without material to include within it. Since this was not at hand in the quantity expected, the Editor was forced to make copy himself or to draft some individuals who were so situated as to be amenable to his big stick or to his persuasion. In fact he had to resort to both means. Hereafter, however, quo warranto proceedings will be instituted against delinquent editors early in the quarter and mandamus proceedings will issue against other Association members who hold up copy willfully.

—C. O. D.

Recent Changes in College Entrance Requirements in Fifteen Eastern Colleges

The North Central Association is always interested in what colleges and secondary schools outside its territory are doing. It is peculiarly interested in changes being made in college admission requirements, since this question is the outstanding one which gave birth to the Association in 1895 and which has also centered in many of its discussions since that date.

In the *Private School News*, Vol. II, No. 2, (April 10, 1926) appears an article giving the recent changes made in the entrance requirements in fifteen of the leading eastern colleges of the United States. The more significant items mentioned in this report are as follows:

AMHERST

Candidates having only three years of Latin admitted provided they present full fifteen points of acceptable credit, including three years in a second foreign language or four points in mathematics. Candidates entering with three years of Latin only are required to continue the study of ancient language in college at least two years.

Entrance "with conditions" now restricted to candidates lacking not more than two points in modern foreign language or one point in other subjects of the fifteen required points.

Credits of candidates from schools on the New England College Entrance Certificate Board's approved list still accepted. From schools on the approved list outside of New England, a complete school record of each candidate with information regarding the quarter of the

class in which his record places him and comment on his character and ability required in determining acceptance without examination.

Preliminary report from principals requested in January.

Preference given for full requirements in classical language—four years Latin or three years Greek.

BROWN

Applicants presenting complete credentials, who stand in the first fifth of their class in approved schools graduating at least 25 students, or who stand in the first two-fifths of their class in approved schools where during the past three years two-thirds of the graduates have gone to college, will be admitted as heretofore without the submission of further evidence.

By "complete credentials" is meant credits by certificates or by examination in specific subjects and supplementary evidence from the school respecting the character, ability, and general fitness of the applicant.

Two units of algebra are now required for admission for the A.B., Ph.B., and Sc.B. degrees.

BRYN MAWR

The President and Faculty of Bryn Mawr College, acting with the approval of the Directors of the College, announce that the examination for matriculation set by the college will be discontinued after 1926. In and after 1927 only the examinations of the College Entrance Examination Board, as listed each year in the Calendar, will be accepted for ad-

mission. Attention is called to the fact that while certain comprehensive examinations are included in the list, Bryn Mawr does not admit students by the so-called New Plan.

CONNECTICUT

In rare instances is a girl admitted who does not rank in the upper quarter of her high school class.

The record as a whole, together with the relative standing, comments of the principal, the apparent success which graduates of the school have had at Connecticut College—all such pertinent factors are considered.

DARTMOUTH

(1) Beginning with the class entering in September, 1926, Dartmouth will permit no entrance conditions.

(2) Our so-called "Special Certificate," by which a man enters without condition by virtue of ranking in the highest quarter of his class, including boys and girls, will in future be available for men who have so ranked during their last two years in approved schools. In the past this highest quarter rule has applied to the work of all four years.

(3) In order that no one school may dominate the situation at Dartmouth, not more than 4% of any Freshman class will be taken from any one school.

(4) In the past we have required that 8 units be presented by certificate in order that any certificate units may count. In future there will be no minimum requirement placed on the number of certificate units.

(5) Italian has been added to the list of modern foreign languages accepted for admission credit.

(6) Dartmouth under her new curriculum offers only one degree, the so-

called A. B. degree. Science has been made an "elective" unit for admission to this degree.

GOUCHER

Applicant must be a graduate of the college preparatory course of a secondary school and fully endorsed by authorities, must have grades of at least 80, and must present credentials showing that applicant has qualifications and personality to make her a desirable member of the college.

HARVARD

1. Preliminary examinations in the fall abolished.

2. Freshman class limited to 1,000 members, including those dropped in the previous year. This limits the men entering from secondary schools to about 830, a decrease of more than 100.

Much weight will be attached to character, personality, and promise as well as to scholarly attainments. The Committee will still give preference, however, to all candidates whose examination average is unquestionably good (75% or higher) and whose whole school record has been satisfactory.

3. The application of the rule concerning candidates to be admitted from the first seventh of their class will hereafter be discretionary with the Committee on Admission. In 1927 and thereafter admission without examination will be restricted to schools which do not ordinarily prepare their pupils for the examinations of the College Entrance Examination Board, to high schools located in smaller cities, in rural districts, and at points remote from Cambridge. In such cases each particular application will be decided by the Committee in light of all evidence in hand.

MT. HOLYOKE

Old Plan grades between 60 and 65 %, and Regents' grades between 75 and 80 % considered doubtful, the Board of Admission reserving the right to reject any record which contains one or more doubtful grades.

Permission to take examinations in September will be given only in exceptional cases.

A psychological test, prepared by the College Entrance Examination Board, to be known as the Scholastic Aptitude Test, is required of all students.

PRINCETON

College Board Examinations and psychological examinations required of all as well as principal's certificate of character and ability.

SIMMONS

Beginning in September a candidate may offer two units of two foreign languages instead of three units of one foreign language as heretofore required.

SMITH

Psychological examination will be required of all applicants except in those rare cases where the credentials were entirely complete the year before, and

(for this year only) of students transferring from other colleges.

Beginning with the college year, 1926-1927, all admissions to the freshman class will be determined by the College Board Examinations.

VASSAR

Since March, 1923, all new applications on same basis, i. e., competitive basis for admission to the limited number of places.

WELLESLEY

No recent changes.

WILLIAMS

One entrance unit in history is still required, but instead of the former requirement of American History, any of the courses in History offered by the College Entrance Examination Board will be acceptable.

YALE

September examinations abolished for final candidates for admission, beginning with all candidates entering in 1927. Scholastic Aptitude Test required of all candidates entering in 1926 and thereafter until further notice.

(C. O. D.)

Thirty-one Years Old

The meeting held in March, 1926, was the thirty-first annual meeting.

How the North Central Association Originated

By CALVIN O. DAVIS,

UNIVERSITY OF MICHIGAN, ANN ARBOR, MICHIGAN

For a number of years previous to 1895 there existed in the state of Michigan an organization known as The Michigan Schoolmasters' Club. The prime purpose of this club was to afford secondary school men and college authorities an opportunity to meet together and to discuss, face to face, mutual problems that in some quarters were tending to emmesh themselves in misunderstandings and in bitterness of feeling. In particular, matters pertaining to college admission requirements and their administration were troublesome.

From the very outset the Michigan Schoolmasters' Club was a success. By reason of its meetings and conferences college men and secondary school people soon came to recognize the human qualities in each other and to sense, in a more complete way, the difficulties, aspirations, and views of the other group. To the extent that mutual acquaintance bred mutual understanding, this in turn bred a spirit of mutual confidence, mutual tolerance, and mutual fair play. As a result of all these forces, the school history in Michigan was (not only previous to 1895 but is to this very day) marked by a placidity that is in striking contrast with the school history in several other states. Peace and contentment of spirit has led to effective cooperation among schoolmasters of all stations, and this, of course, has resulted in phenomenal progress in education in all its aspects.

The benefits arising from the operation of the Schoolmasters' Club, also developed, in time, a keen missionary spirit among its members. What was proving so beneficial in Michigan was desired for others. This impulse to share the accumulating advantages finally took shape in the form of a resolution to the effect that the University of Michigan, the University of Wisconsin, Northwestern University, and the University of Chicago "be asked to unite with a committee of the club in issuing a call for a meeting to form an association of schools and colleges in the north central states." This resolution was adopted by the club at its annual meeting held at Ypsilanti, Michigan, on December 1, 1894, and was offered by Principal W. H. Butts, of the Michigan Military Academy, Orchard Lake, Michigan.

In accordance with this resolution invitations were sent to several prominent representatives of higher and of secondary education in the ten states of Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Nebraska, and Kansas. The invitation requested the representatives to meet at Northwestern University, Evanston, Illinois, on March 29 and 30, 1895, and suggested that the following questions, "among others," should constitute the themes for discussion:

1. Is it desirable and practicable to form an association?
2. If so, what states should compose the territory in which it is to act?

3. What shall be the qualifications for membership to the Association?
4. How often shall the association meet and where shall the meetings be held?
5. Shall the association take steps looking to co-operation with the New England and Middle States Associations in securing greater uniformity in secondary instruction and in the requirements for admission to colleges?

Certain other subsidiary topics were included in the call and certain items of a practical kind relating to hotels and railroads were attached.

The letter of invitation was signed by President James B. Angell of the University of Michigan, President Henry Wade Rogers of Northwestern University, President C. K. Adams of the University of Wisconsin, President William R. Harper of the University of Chicago, Principal W. H. Butts of the Michigan Military Academy, Principal W. A. Greeson of the Grand Rapids, Michigan, Central High School, and Principal R. G. Boone of the Michigan Normal School at Ypsilanti.

On March 29, 1895, thirty-six delegates responded to their names when the meeting was called to order. Of these five were from Ohio, five from Michigan, four from Indiana, fourteen from Illinois, three from Wisconsin, three from Iowa, and two from Missouri. The thirty-six individuals constituted, too, a very distinguished group of educators. Twenty-two of them were presidents of colleges or universities, ten were principals or directors of secondary schools, three were superintendents of schools, and one was a humble college professor. The list of presidents was as follows:

President W. H. Scott, Ohio State University.
 President Charles F. Thwing, Western Reserve University.

President William G. Ballantine, Oberlin College.

President James W. Bashford, Ohio Wesleyan University.

President James B. Angell, University of Michigan.

President Lewis R. Fiske, Albion College.

President Joseph Swain, Indiana University.

President George Burroughs, Wabash College.

President Andrew S. Draper, University of Illinois.

President Henry Wade Rogers, Northwestern University.

President William R. Harper, University of Chicago.

President John M. Coulter, Lake Forest University.

President John E. Bradley, Illinois College.

President W. H. Wilder, Illinois Wesleyan University.

President Charles K. Adams, University of Wisconsin.

President Edward D. Eaton, Beloit College.

President George S. Albee, State Normal School, Oshkosh.

President Charles A. Schaeffer, State University of Iowa.

President William F. King, Cornell College.

President Homer H. Seerley, State Normal School, Cedar Falls.

President Richard H. Jesse, University of Missouri.

President Winfield S. Chaplin, Washington University.

The superintendents and principals of secondary schools were:

Superintendent A. F. Nightingale, Chicago, Illinois.

Superintendent J. W. Knight, La Porte, Indiana.

Superintendent N. C. Dougherty, Peoria, Illinois.

Principal E. L. Harris, Cleveland, Ohio.

Principal W. H. Butts, Orchard Lake, Michigan.

Principal W. A. Greeson, Grand Rapids, Michigan.

Principal F. L. Bliss, Detroit, Michigan.

Principal George N. Carman, Chicago, Illinois.

Director H. H. Belfield, Chicago, Illinois.

Principal J. J. Schobinger, Chicago, Illinois.

Principal H. L. Boltwood, Evanston, Illinois.

Principal C. A. Smith, Lake Forest, Illinois.

Principal H. E. Fish, Evanston, Illinois.

The one lone professor was C. A. Waldo, of DePauw University.

The meeting was called to order by President Rogers of Northwestern University, a temporary organization was effected, a constitution drawn and adopted, and officers for the succeeding year were elected. These officers were as follows:

President: James B. Angell, University of Michigan.

Secretary: F. L. Bliss, Detroit High School.

Treasurer: George N. Carman, Morgan Park Academy.

Executive Committee:

Charles K. Adams, University of Wisconsin.

A. F. Nightingale, Chicago.

Edward L. Harris, Cleveland.

Clarence A. Waldo, DePauw University.

The president, secretary and treasurer, ex officio.

The newly organized association then voted to hold the first regular annual

meeting at the University of Chicago, on April 1, 1896, and agreed to make the two following topics the general themes for discussion at that time, namely: "What Constitutes a Secondary School?", and "What Constitutes a College?"

Thus the North Central Association of Colleges and Secondary Schools was founded with thirty-six institutional and individual charter members.

The First Annual Meeting

The first annual meeting of the Association (not counting the preliminary meeting for organization) was held on the campus of the University of Chicago, April 3 and 4, 1896, President Angell presiding. At this meeting eighty-two institutions were represented, and in addition thirty-one persons who had taken out individual membership in the Association. The list of institutional members was made up as follows:

Ohio -----	10	Minnesota -----	6
Michigan -----	14	Iowa -----	7
Indiana -----	6	Missouri -----	4
Illinois -----	26	Nebraska -----	2
Wisconsin -----	5	Kansas -----	2

The thirty-one individual members were drawn from the following states:

Ohio -----	5	Wisconsin -----	2
Michigan -----	8	Minnesota -----	1
Indiana -----	3	Iowa -----	1
Illinois -----	10	Missouri -----	1

Thus, in a single year, the membership of the Association had increased more than 213%—from 36 to 113. Or, if institutions alone be considered, the gain is more than 127%—from 36 to 82. In the meeting for organization purposes colleges and university presidents constituted the largest number of attendants, but at the meeting in 1896,

fifty-two of the eighty-two institutions represented were secondary schools. On the other hand, only one "mere college professor" attended the preliminary meeting in 1895, while all but seven of the "individual members" in attendance at the first annual meeting were college or university professors.

The Friday afternoon meeting was devoted to an address of welcome delivered by President Harper of the University of Chicago, a response by President Angell of the University of Michigan, and a more or less free discussion of the question of college entrance requirements in history. President Angell, in his address, referred particularly to the great change that had come during his lifetime in the relations of college and secondary schools, saying, in part:

"Within my recollection a most auspicious change in the relations of colleges and secondary schools has taken place. In my boyhood there were in New England very few high schools which prepared boys for college. The relations between the colleges and the academies were far from intimate. While I was a student in three preparatory academies I saw only once a college professor in school, though one of the schools was in a building owned by a college adjacent to it. We boys in school and the public generally knew little of what the college was or what it really attempted to do. People for the most part thought of college professors as harmless persons living in monastic seclusion and disseminating useless knowledge to aristocratic and rather eccentric young men. The academy was better comprehended, and was deemed of more practical value than the college. But it pursued its way without much regard

to the work or requirements of the college, since by far the larger part of the students did not go to college."

The morning session of April 4th was devoted to a consideration of "What Constitutes a College and What a Secondary School," President Jesse of the University of Missouri leading the discussion. The afternoon session took the form of a symposium whereat the various modes of admitting students to college were explained and discussed. Among the speakers on this topic were Professor B. A. Hinsdale, University of Michigan, Professor Harry Pratt Judson, University of Chicago, and Professor C. H. Moore, University of Chicago.

At this meeting constructive action was taken on several important educational matters. Among these were the following:

1. A resolution favoring the bringing about of a conference of all the various associations of colleges and preparatory schools in the United States.
2. A resolution offering to cooperate with the National Education Association in an effort to "bring about a better understanding between the colleges and the secondary schools regarding the quality and quantity of work required in preparation for admission to our colleges."
3. A resolution to the effect that "in the opinion of this Association, no college is considered in good standing that confers the degree of Doctor of Philosophy or Doctor of Science, except after a period of at least two years of residence and of graduate study" and "that no college not in good standing under the above resolution is eligible to membership in this association."

Thus almost at the very outset the Association began its policy of seeking to elevate standards in colleges and secondary schools and to admit to its membership only such institutions as sincerely endeavored to abide by standards that were relatively high.

President Charles K. Adams of the

University of Wisconsin was elected president for the year 1896-1897 and Principals Bliss and Carman were retained respectively as secretary and treasurer. In addition, two vice-presidents were elected to represent each of the ten states then members of the Association.

Three More Sections of the Constitution

ARTICLE V

OFFICERS AND COMMITTEES

SECTION 1. *The officers of the Association shall be a President, two Vice-Presidents, a Secretary, and a Treasurer. The President and two Vice-Presidents shall be elected at the annual meeting of the Association for a single term of one year or until their successors are elected. The Secretary and the Treasurer shall be elected at an annual meeting for a term of three years and shall be eligible to re-election for not more than one like term of three years.*

SEC. 2. *There shall be an Executive Committee, a Commission on Institutions of Higher Education, a Commission on Secondary Schools, a Commission on Unit Courses and Curricula, constituted as hereinafter defined, and such other Commissions or Standing Committees as the Association may from time to time determine.*

SEC. 3. *The Executive Committee of the Association shall consist of the President, the President of the next preceding year, the Secretary, the Treasurer, four additional members to be elected annually by the Association, the chairmen of each of the Standing Committees or Commissions provided for in Section 2. It shall receive and approve applications for membership in the Association and shall report the list of members. It shall receive the lists prepared by the Commissions on Institutions of Higher Education and Secondary Schools, shall pass on these lists; shall cause them to be published, and shall hear and determine appeals, if any, against the findings of these Commissions. It shall nominate members of the by the Association. It shall fix the time of meetings not otherwise provided for; shall prepare programs; shall fill vacancies in the list of officers, and shall transact any necessary business when the Association is not in session. All the acts of the Executive Committee shall be subject to revision by the Association.*

Effect of the Junior High School upon College Entrance Requirements*

By ARTHUR J. KLEIN,

CHIEF, DIVISION OF HIGHER EDUCATION, U. S. BUREAU OF EDUCATION

The claim is made by schoolmen interested in the development of the junior high school, that present college entrance requirements restrict the junior high school in the development of unified completion programs. This question has aroused so much discussion and has brought the proposal to modify existing college entrance requirements so prominently before State and regional accrediting agencies, that upon May 1, 1926, the United States Bureau of Education sent a questionnaire to the 744 colleges and universities listed in the Educational Directory for 1926. In this questionnaire, the following questions were asked:

- "1. Do you at present accept three years of senior high school work (12 units) for admission without reference to preceding work? Yes. No.
2. (a) Do you require a record of the last year of junior high school work in addition to the three-year senior high school record? Yes. No.
- (b) May a graduate of a junior high school offer his certificate of graduation from the junior high school as

the equivalent of three elective units for entrance credit? Yes. No.

3. Do you give any entrance credit for work done before the third year in the junior high school (language, for instance)? Yes. No.
4. Would you be inclined to accept 12 units of senior high school work for entrance, if other institutions and accrediting agencies approved such procedure? Yes. No.
5. If you care to make further comment upon this subject, please do so below."

Replies were received from 626 institutions. The officers signing the reports were distributed as follows: 114 presidents; 206 registrars; 156 deans; 17 chairmen of Committees on Admission; 16 secretaries of faculty; 8 recorders and examiners. The remainder, excluding 83 that failed to sign, were scattered among other officers. Comments on the question were made by 258 institutions, 41 per cent of the total number replying.

It will be noted that this questionnaire was constructed with a certain degree of innocent and rather obvious artifice. If the institution in reply to question 1 states that it does admit three-year senior high school graduates upon 12 units "without reference to preceding work," it should be fairly obvious that it can not require a record of the last year of junior high school; question 2(a) will of necessity be answered by *No*. Yet 16 institutions answered *Yes* to both 1 and 2(a) and in one case answered the inquiry as to whether the institution ad-

*This article is published because of the fact that the North Central Association, at its last meeting, instructed its secretary to acquaint higher institutions with the importance of facing the problem of defining entrance-requirements in terms of the senior high school. The Association has named a committee under the chairmanship of Professor A. A. Reed of the University of Nebraska to submit plans at the 1927 meeting for college-entrance requirements in terms of the senior high school. It is hoped, therefore, that this article will be studied by the members of college faculties.

—J. B. Edmonson, Secretary.

mitted upon the 12 unit senior high school basis without reference to preceding work, by stating, "Yes, provided the total is 15 units." In cases of this kind replies to 2(a) have been eliminated from the tabulation of results.

It was thought that questions 2(a) and 2(b) were so phrased that the statement that the record of the last year of junior high school is required, would of necessity mean that a student could not offer "his certificate of graduation from a junior high school as the equivalent of three elective units." However, the 208 replies which answered *Yes* to both questions show that this was not the case. It was clear that the difficulty arose from misunderstanding of 2(b). Tabulation of replies to 2(b) was made, therefore, upon the basis of actual practice as indicated by remarks or comments. This leaves the results on the question of practice in accepting junior high school graduation as a blanket substitute for three elective units somewhat less complete than replies to other questions. Twenty-four replies, because of obvious defects, were omitted from consideration leaving 602 institutions for tabulation in whole or in part. The results of the inquiry are given in the following tables:

Four Year Colleges

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	39	7.8	452	92.2	491
Question 2 (a)	404	89.9	45	10.1	449
Question 2 (b)	30	11.1	241	88.9	271
Question 3	102	22.9	342	77.1	444
Question 4	312	73.2	114	26.8	426

Junior Colleges

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	5	5.5	86	94.5	91
Question 2 (a)	80	91.9	7	8.1	87
Question 2 (b)	4	8.5	43	91.5	47
Question 3	25	27.7	65	72.3	90
Question 4	75	84.2	14	15.8	89

State Institutions
STATE UNIVERSITIES

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	3	7.5	37	92.5	40
Question 2 (a)	33	91.5	3	8.5	36
Question 2 (b)	1	4.8	20	95.2	21
Question 3	5	12.9	31	86.1	36
Question 4	22	78.5	6	21.5	28

STATE AGRICULTURAL COLLEGES

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	-----	-----	18	100.0	18
Question 2 (a)	17	100.0	-----	-----	17
Question 2 (b)	-----	-----	6	100.0	6
Question 3	3	20.0	12	80.0	15
Question 4	11	73.3	4	26.7	15

OTHER STATE INSTITUTIONS

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	1	5.5	17	94.5	18
Question 2 (a)	12	80.0	3	20.0	15
Question 2 (b)	-----	-----	5	100.0	5
Question 3	-----	-----	14	100.0	14
Question 4	11	73.3	4	26.7	15

TOTALS FOR STATE INSTITUTIONS

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	4	5.3	72	94.7	76
Question 2 (a)	62	91.1	6	8.9	68
Question 2 (b)	1	3.2	31	96.8	32
Question 3	8	12.3	57	87.7	65
Question 4	44	75.8	14	24.2	58

Junior colleges, State and municipal institutions are omitted from the following tabulations:

Private Colleges with Enrollment Under 500

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	25	9.4	239	90.6	264
Question 2 (a)	215	90.7	22	9.3	237
Question 2 (b)	20	12.9	135	87.1	155
Question 3	56	23.4	183	76.6	239
Question 4	182	75.8	58	24.2	240

Private Colleges with Enrollment from
500 to 1,500

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	8	7.4	99	92.6	107
Question 2 (a)	89	87.2	13	12.8	102
Question 2 (b)	4	7.1	53	92.9	57
Question 3	28	26.9	76	73.1	104
Question 4	62	66.6	31	33.4	93

Private Colleges with Enrollment Over 1,500

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	2	5.4	35	94.6	37
Question 2 (a)	35	94.6	2	5.4	37
Question 2 (b)	4	16.0	21	84.0	25
Question 3	4	12.1	29	87.9	33
Question 4	21	70.0	9	30.0	30

Since the regional associations all have or will have the question of the relationship of the colleges to the 6-3-3 plan to consider, tabulations of all four-year institutions have been grouped to show practice in the territories of these associations. Institutions which are not members of any association are included; if the results for the college and university membership of an association are desired they will be compiled upon request accompanied by a list of the institutions to be tabulated.

New England Association of Colleges and Secondary Schools

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	1	2.9	33	97.1	34
Question 2 (a)	27	87.1	4	12.9	31
Question 2 (b)	2	10.0	18	90.0	20
Question 3	4	13.8	25	86.2	29
Question 4	14	58.3	10	41.7	24

Association of Colleges and Secondary Schools of the Middle States and Maryland

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	4	4.1	94	95.9	98
Question 2 (a)	85	94.1	5	5.9	90
Question 2 (b)	4	7.5	49	92.5	53
Question 3	21	22.8	71	77.2	92
Question 4	49	59.1	34	40.9	83

North Central Association of Colleges and Secondary Schools

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	25	12.1	181	87.9	206
Question 2 (a)	162	87.6	23	12.4	185
Question 2 (b)	20	17.7	93	82.3	113
Question 3	40	20.6	154	79.4	194
Question 4	161	83.4	32	16.6	193

Association of Colleges and Secondary Schools of the Southern States

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	7	7.8	82	92.2	89
Question 2 (a)	78	86.6	12	13.4	90
Question 2 (b)	4	6.7	56	93.3	60
Question 3	25	28.1	64	71.9	89
Question 4	67	71.3	27	28.7	94

Northwest Association of Secondary and Higher Schools

	Yes	Per cent	No	Per cent	Total No. replies
Question 1	1	3.2	31	96.8	32
Question 2 (a)	26	100.0	-----	-----	26
Question 2 (b)	-----	-----	13	100.0	13
Question 3	6	22.2	21	77.8	27
Question 4	16	72.7	6	27.3	22

These tables show that a higher percentage, 9.4 per cent, of colleges with enrollments of less than 500, admit upon the sole basis of 12 units earned in the three-year senior high school than is the case with any of the other classes of institutions for which tabulations are made. Private colleges enrolling over 1,500, with 5.4 per cent, are the most conservative of the groups tabulated upon the basis of size. The medium sized institutions, with 7.4 per cent, also fall short of the general percentage, 7.8 per cent, for all four year institutions. State universities with 7.5 per cent are only slightly less liberal than the general run of four year institutions, but the percentage for all State supported colleges and universities, 5.3 per cent falls considerably short of this.

Tabulations by territory included in each of the regional accrediting associations, show that practice in regard to admission to college upon the basis of 12 senior high school units is most liberal in the region covered by the North Central Association. Over 12 per cent of the colleges reporting admit upon the 12 unit basis without reference to preceding work. The territories of the New Eng-

land and the Northwest Associations are most conservative with 2.9 per cent and 3.2 per cent, respectively. In the region of the Southern Association the percentage, 7.8 per cent, of institutions admitting on the 12 unit basis is the same as the general percentage for all four year institutions. Percentages determined upon a regional basis are of course affected by the degree to which the 6-3-3 plan of organization has developed.

Institutions in the following States indicate that there are no or so few schools organized on the 6-3-3 plan that the question is not a matter of serious consideration: North Carolina, South Carolina, Illinois, Texas, Oklahoma, New York, Oregon, Mississippi, Georgia, Missouri, Colorado, Massachusetts, Delaware, Nevada, South Dakota, Rhode Island, Maine, Minnesota, Virginia, Kentucky, Indiana, and Florida.

Thirty four-year colleges of a total of 271, 11.1 per cent, whose replies or comments were such as to indicate that the question was understood, allow graduation from junior high school to count as the equivalent of three elective units in making up the 15 required for admission; of the thirty, twenty are institutions with an enrollment of less than 500. The number in the other classes of institutions covered by the tabulations is negligible. Again the North Central Association shows a larger percentage of institutions granting elective units on the basis of junior high school graduation than the territories of any of the other regional associations.

Almost one-quarter of the four-year colleges, 22.9 per cent, 102 institutions out of a total of 444, allow credit for certain subjects carried on before the third year in junior high school. In this case private colleges with an enrollment

of 500 to 1,500 are most liberal, 26.9 per cent making such allowances. In the Southern Association 28.1 per cent grant such credit in language for the most part, while in the territory of the New England Association only 13.8 per cent give credit of this kind. The territory of the three other associations follows this practice of giving such credit in over 20 per cent of the institutions which answered the question.

Seventy-three and two-tenths per cent of the four-year colleges would be inclined to accept the 12 unit method of admission if other institutions and accrediting associations approved the procedure. State universities with 78.5 per cent are most inclined to adopt this plan. Private colleges with enrollments of from 500 to 1,500 are most conservative with 66.6 per cent, while private colleges with enrollments of over 1,500 with 70 per cent are also less inclined to change than are four-year colleges as a whole. Of the colleges in the territory of the North Central Association 83.4 per cent are willing to adopt the plan. In the territory of no other association are the colleges as hospitable to the plan as the four-year colleges as a whole. The institutions in the territory covered by the New England Association are most conservative with 58.3 per cent, but the colleges in the region of the Middle States and Maryland with 59.1 per cent, are only slightly less reluctant.

The comments in large part concern minor matters although several raise points of interest and significance. Twenty-eight institutions go no further in their comments than to state that they will follow or "are controlled by" one of the regional accrediting associations, the State university or the State department of education. Twenty-two state

simply that no official action has been taken, but twenty-five others add in effect that the question is up for consideration and adjustment of divided opinion. Several call attention to the resolution of the North Central Association upon the subject:

"That the Commission on Secondary Schools request the association to repeat its urgent invitation to the colleges included within the North Central territory to revise their terms of admission in such a manner as to permit students to qualify for entrance on the basis of units of work—eleven or twelve in number—accomplished in the tenth, eleventh, and twelfth grades of the secondary school."

Others recall that the Southern Association has a committee to consider the matter. Copies of a report adopted by the New England Association of Colleges and Secondary Schools were also furnished. This report reads as follows:

"The junior high school is an established fact in the organization of secondary education, and the chief burden of preparation for college must rest on the senior high school. It should be possible for the pupil who has followed a non-college preparatory curriculum in the junior high school to meet the college entrance requirements in the senior high school."

The plan of the University of Nebraska which several institutions follow was also supplied and described. The quotation from a publication issued by the University follows:

"The University of Nebraska has adopted the plan of admission from senior high schools for all high schools, leaving the former plan as optional temporarily.

"Graduates of accredited high schools may have full admission to freshman standing on 12 units (24 points), conditional admission on 11 units completed in the senior high school (Grades 10, 11 and 12), provided that a year of algebra and a year of foreign language may be counted from work carried in Grade 9, in such instances the total credits earned in Grades 9 to 12 being fewer than 15 units (30 points).

"Nine academic units are required, seven of which shall consist of a major (3 units) and two minors (2 units each), which shall include English and mathematics for all colleges. Academic subjects are defined as English, foreign languages, mathematics, natural sciences and social sciences. A major in foreign languages may consist of a year of one language and two of another, but a minor must be in a single language."

A committee appointed by the Pennsylvania State Educational Association "to consider the question of the junior high school and its relation to college entrance requirements", the Lafayette Chapter of the American Association of College Professors, and a series of conferences held in connection with Schoolmen's Week at the University of Pennsylvania in March, 1925, agree upon the following: "That a certificate for twelve units from a senior (three-year) high school for a student who has previously completed a three-year course in a standardized junior high school be accepted for college entrance and accorded the same recognition as is given a certificate for fifteen units from a four-year high school. Specific preparation for college should be restricted to the last three years of the high school thus freeing the junior high school from the responsibility of direct preparation for college entrance."

The University of Kansas states "the question is now being considered by the Chancellor's cabinet made up of Deans of Schools and Heads of Divisions." Several other institutions have appointed committees or taken other formal action to study the question. Clark University reports that the policy which will be adopted will probably be in accord with the following principles: "First, base admission on three-year senior high school, crediting to the full the language and mathematics which may be started

in the junior high school and continued; second, if this does not provide 15 units, will accept specified units taken in the last year of the junior high school. Probably general science would be preferred."

Twenty-two replies make comments which emphasize favorable attitudes toward the proposal; while 17 emphasize doubt or reluctance without stating specific reasons for the attitude. In three or four instances admission is by examination only and the intention is firm that no change shall be made. One institution states that its charter will not permit it to adopt the plan. In twenty-one cases the desire is expressed to continue the present plan of accepting the certification of the principal of the senior high school for work done before entering upon Grades 10 to 12. A few institutions, nine, tend to object to acceptance of only 12 units from the three-year senior high school under the apprehension that this will be making preparation for college easier. They clinch the argument with the assertion that high school preparation is poor enough as it is. One goes so far as to assert that adoption of the 12 unit basis of admission "will mean that the college will be supplanted by the high school."

Some desire is also expressed by 12 institutions that prior to adoption of the plan, the junior high school to be standardized to insure satisfactory work prior

to the three-year senior high school; "because many so-called junior high schools are merely seventh and eighth grades," is characteristic of this comment. The University of Washington states that as long as the third year of the junior high school is equivalent to the ninth grade or the first year of the four-year high school, no trouble is to be expected, but when the junior high school is standardized to the point where it is offering unified three-year courses, difficulties will arise. In four instances in this connection the conviction is expressed that the foreign language work should be started in the junior high school period, thus implying the necessity of reference to junior high school records or the belief that foreign language work acceptable for college entrance from senior high school should not include beginning language courses. One institution suggests that a five-year period be allowed for adjustment to some definite plan looking to admission on the 12 unit basis. Favor of the plan appears in twenty-five cases to be conditional upon assurance that the 12 units of senior high school work cover definite prescriptions in English, foreign language, mathematics, and science. The institutions are inclined, therefore, to favor for the present, admission on the basis of 12 credits from the senior high school and 3 elective credits from the junior high school.

Association Officers, 1926-1927

President—J. D. Elliff, Columbia, Mo.

First Vice-President—H. L. Miller, Madison, Wis.

Second Vice-President—H. G. Childs, Bloomington, Ind.

Secretary—J. B. Edmonson, Ann Arbor, Mich.

Treasurer—W. I. Early, Sioux Falls, S. D.

Problems of College Entrance Arising from the Development of the Junior High School

BY PHILIP W. L. COX

PROFESSOR OF SECONDARY EDUCATION, NEW YORK UNIVERSITY

In this presentation of the problems of college entrance arising from the development of the junior high school, the following positions will be taken:

1. That the junior high school is an expression of a revolutionary conception of education. It prepares for all life, and hence for college life, but not for admission examinations.

2. That there is great similarity between the current educational developments in the college and those in the junior high school, both in regard to curriculum adjustments and to student participation and social activities.

3. That there is no opposition between qualities desired in its students by colleges, and the qualities that the junior high school aims to develop.

4. That the personal rating, scholastic record, and the subject requirements of the tenth, eleventh, and twelfth grades furnish adequate evidence of scholastic fitness for college work.

5. That there is needed an activity analysis of college students to determine what should be taught in secondary preparatory schools. Admittance might then depend on the degree of successful practice of these behavior-forms, plus native intelligence.

6. That the junior high school is potentially far more important to the continuance and improvement of our social institutions than is the college, since the whole generation of early adolescents is getting direct preparation for social

participation and individual development in the junior high school.

The Situation as It Exists at Present

The junior high school consists of children of the age groups corresponding to grades seven, eight, and nine; theoretically, this means children from twelve to fifteen years of age. It is assumed that children at twelve years of age are pre-adolescent, active, rugged, self-centered, of transient interests—the “Big Injun” age;¹ and it is expected that at fifteen they have become adolescent, will have passed through the period of most rapid growth with its resulting incoordinations, not only muscular and nervous, but also social and temperamental. As a matter of fact, the more significant junior high schools frequently admit bright, “accelerated” children before they are twelve, and also admit “retarded” children of thirteen even though they have not completed six grades of elementary school. Hence, the group completing junior high school would not be exactly fifteen. But on the whole, the grade-levels of the junior high school are far more homogeneous in age and in social maturity than elsewhere in our educational system.

Now, the public junior high school is not a college preparatory school. It has to do with the education of children of late pre-adolescence and early adolescence for greater social efficiency, for

¹cf. Pringle, *Adolescence and High School Problems*, p. 8.

better uses of leisure, and for good will; these ends it promotes by means of present practices. Its fundamental conception is that what children will do in the future depends largely on what they do adequately and joyously now, that what children will know and what they will do in the future will depend on what they desire to do, to know, and to be. Hence, the junior high school endeavors to build up the emotional life of the child, to establish his self-confidence, his feeling of adequacy, his desire to participate in constructive enterprises, and his joy in service to his fellows and to his school.

At the present time, the greatest obstacle to the attainment of this ideal in the junior high school is the stupid and paralyzing fear of college entrance requirements. In a broad sense, the colleges are not to blame for this; they are simply inert and self-centered; hence, they are sometimes arrogant because they are ignorant of the *broad* program of public education. The blame, so far as it can be assessed, will have to be laid largely at the door of senior high school faculties, of pompous, unreasonable parents, and of cautious, politically sensitive school boards and superintendents of schools. By tradition, the burden of selection and preparation for college entrance has been the recognized function of the secondary school. If students fail of admission to college, parents are critical of the school; and school people, being human, "pass the buck" to the junior high school.

Algebra, Latin I, English rhetoric, ancient history were relics of the barbaric freshman year of the high schools of the nineteenth century. I say barbaric—perhaps savage would be the more exact word. For the stupid, meaningless

grind of the traditional freshman year has not only disheartened and disgusted and discouraged boys and girls, so that most of those who formerly entered high school left within a year, but also in the past the freshman program has actually prevented many eighth grade graduates from entering high school. Even with the better curriculum of the present, about forty per cent of the four-year high school enrollment is in the freshman class.

With the development of the junior high school, there have been greatly enriched curriculum opportunities for ninth grade pupils. The prescribed subjects in the more progressive junior high schools have been so modified as to deal with present activities of children, which are, as a matter of fact, very similar to those actually important in adult life.

Take, for example, the English language activities of most importance in adult life as gathered from 2615 different occupations by the English Council's Committee on Place and Function of English in American Life:²

"Interviews: word of mouth inquiries; reports to a superior; instructions for subordinates; conferences.

Conversation: with casual acquaintances; at social gatherings; over the telephone.

Public speaking: informal discussion; preparing addresses.

Writing: informal notes and memos for one's self; formal notes of invitation, introduction, etc.

Reading: legal documents.

Listening: to an interview, a conference, or a public meeting."

Now, the junior high school undertakes, by means of present practice of

²School and Society, XXIII, No. 588, pp. 424-5.

these very activities, to improve the pupil's ability and desire to speak and write correctly. Analyzing sentences and memorizing Latin names for English forms have little or no effect on either ability or desire to improve one's spoken or written English. Indeed, in junior high schools in foreign neighborhoods, thirty per cent of the written errors are mistakes in idiom not classifiable as grammatical at all; the mistakes in correct usage of forms are frequent in number but few in different kinds of mistakes.³

Similarly, we might look to see how the junior high school gives present practice with satisfaction in the activities typical of civic life, in the promotion of individual and community health, in a dispassionate, critical, but sympathetic attitude toward social institutions of school and community. We might observe the new aspects of science and mathematics teaching by which junior high school boys and girls are studying their own environments, and so are gaining a familiarity with and an understanding of man's place in nature, his uses of natural laws and materials, and the instruments and language which man uses in dealing with science. I wish that we might look at some of the successful practices used by junior high schools to promote the appreciation of beauty, and of the more "spiritual" aspects of their natural and social environments. And finally, if I could paint an adequate picture of the changes that take place in homes and in whole neighborhoods due to adequate leadership by the junior high school teachers of practical arts and home making, I could give

you a new vision of the possibilities of education as a telic process.

It is not that pupils from vital junior high schools know more or can do more than pupils from conventional schools—though I am sure that they do and can; the important point is that they desire to do more, to know more, to be more, and *that they feel adequate* to fulfill these desires.

So much for the outcomes of the junior high school's core-curriculum—the activities that are alike or very similar in kind and amount and in which all pupils engage.

Junior high schools also provide more or less specialized educational opportunities of two types for the attainments of the same objectives. These are very frequently prescriptions and electives for pupils to overcome shortcomings in fundamental skills and knowledges; and nearly all junior high schools offer elective opportunities to stimulate and develop inherent and socially acquired interests and abilities in fields of science and mathematics, of languages and literature, of artistic expression, and of prevocational work.

By means of its core-curriculum and elective courses, and even more through its pupil clubs, assemblies, advisory systems, athletics, publications, and internal government, the school offers every pupil according to his genius, broad practical experiences similar to those of social life, and hence most adequately preparatory for active participation in life. In other words, it is an intensified and intelligently directed democracy of all of the children of the community at the period when friendly and sympathetic control is most essential. In this atmosphere of enthusiastic participation in a widely diversified program of activities,

³Driggs, H. R.: *Equipment of Pupils Entering Junior High School*, unpublished doctor's dissertation, N. Y. U. 1926.

every pupil may discover for himself his aptitudes and interests. Hence, he may set out more earnestly and intelligently on his further educational and vocational career, and may find the place in the social scheme where he can contribute most and feel most adequate.

Children have questions regarding sex, relations to parents, social approvals, individual interests and behaviors that are seldom asked directly of parents or teachers. But pupils could be helped to answer these questions for themselves if teachers would give sufficient thought and effort to the promotion of situations in which some or many of these questions might arise naturally, and find their answers as behavior-adjustments—how to apologize for an offense, how to deal with an unreasonable and irate parent or other adult, how to behave with members of the opposite sex in all typical situations of life, how to examine critically, but sympathetically all sorts of social institutions ranging all the way from taking off one's hat on entering a house to the authority of the Supreme Court of the United States. The adoption of a fearless scientific attitude toward life can be gained only from direct experience with life itself.

The student in our high schools needs most to feel the supreme importance of his own questions. As Hart expresses it: he has a right to have his own questions; his own questions are more important than are mathematical or chemical formulae; not to ask them is to suffer partial death, and not to be permitted to ask them is a sort of spiritual murder; to seek all his days for answers to them is the way of wisdom; and all mathematical formulae—all the sciences and learnings, in fact—are significant just in the measure that they help us in the

long run to answer the profound questions of life and work, of love and happiness.⁴

It should be noted that the dynamic conception of education that underlies this revolutionary new institution is functioning in the senior high school, and in the colleges themselves as well. The emphasis on the social-civic aim of education has gained headway in the high school in spite of the colleges. General courses in social science fields are prescribed in some states by legislative action; in others they are prescribed or advised by state departments.

Even in the colleges the curriculum has been modified to include courses designed to adjust the student to the college environment; for example, College Aims (Antioch); Orientation Lectures (Brown); Introduction to College Work (John Hopkins). Then there are courses designed to give a historical background to contemporary civilization; for example, Introduction to Contemporary Civilization (Columbia and many other colleges using the Columbia syllabus); Historical Introduction to Political Science and Economics (Princeton). A third group designed to present the leading problems of American citizenship has been worked out; for example, Problems in Citizenship (Dartmouth, Leland Stanford, Missouri). There is a fourth group designed to train the student in thinking; for example, Introduction to Reflective Thinking (Columbia). In addition to the courses that may be properly classed in one of the foregoing groups, one institution, at least, offers an introductory course in Evolution. In general, where these new courses are offered, students are required to take

⁴The Plastic Years, Survey Graphic, April, 1926.

them in either the freshman or sophomore year, but in some cases they are elective.⁵

Not only have these formal curriculum modifications appeared in colleges, but there have been also vital advances in serious cooperations of the college administrations with undergraduate groups. Of outstanding importance and excellence was the report of the Committee of Dartmouth students appointed by President Hopkins, especially since the college recognized their work as curricular by granting credit toward graduation for it. Most recently there has been published the report of the Harvard Student Council considering and offering solutions for many college problems.⁶

In an editorial in the Harvard Alumni Bulletin for April 15, 1926, appears the following most stimulating comment on the changes in college practices:

"The new tutorial system, the new general examination system, and whatever else is new in Harvard College, work in the direction of promoting a closer relation between what you want to do and what you ought to do. They are calculated to break down the line between "curricular" and "extra-curricular" activities, by introducing the extra-curricular spirit into the curricular subject-matter. It is hoped that the day may come when the undergraduate will get as much "kick" out of adventuring in the arts and humanities as the assistant-manager candidates now get out of piling footballs on the side-lines or removing the shin-guards from the varsity catcher."

Surely it is not reasonable to suppose that intelligent college faculties who are busy making such adjustments as these

in their own curriculum practices would willingly stifle an institution of such promise as the junior high school. This would be impossible to believe if one could be sure that college faculties realized that not everybody goes to college. Great as has been the growth of college enrollments, it is still true that for every 1,000 students enrolled in the first five grades, 342 enter the conventional high school, 139 graduate from high school, 72 go on to college.⁷ If college faculties believe in the new curriculum for the 72, then they surely can not knowingly deny it to the 928 who do not go to college.

As a matter of fact, it is not good intentions or intelligence that is lacking; it is a dynamic drive to overcome the traditional self-complacency of their committees on admission or whoever may be responsible for the nineteenth century mind-set.

One is in danger of personifying a college, of course; but it does give one pause to read a statement by a college president complaining that college freshmen cannot read a book, but must be given assignments of pages or even paragraphs; and another complaint from the same college president says:

"Credits for courses, as an equivalent or substitute for knowledge, are coming to be recognized as one of the gravest maladies in American education, for which the colleges, and even the graduate schools, are largely responsible."

Now these statements are both from the president of my own *alma mater*, a man for whom I have the greatest admiration. And yet, the very college of which he speaks is binding junior and senior high schools so that they must educate boys in ways that make it improbable that they will be able to read a serious book through reflectively. And

⁵School and Society, Vol. XXI, No. 547, p. 732-3.

⁶Harvard Advocate, April, 1926.

⁷Accredited Secondary Schools in the U. S. Bureau of Ed., 1925, page 1.

that very college is perhaps the worst example of all men's colleges in the drive for marks! marks! marks!!! as a substitute for knowledge in the high school.

Pupils learn the reactions that they give birth to and no others; boys learn to pitch baseball by practice with satisfaction in controlling the ball. And the boy or girl who practices the doing of daily assignments in history and Latin in order to satisfy the teacher so as to get marks that will get him into Harvard or Smith learns to study assignments and to be satisfied with marks as a substitute for knowledge.

In effect, what is the constant appeal and drive of college preparation for the pupil? Get your Latin, get your Latin—never mind the sunset, never mind the fact that your tired mother is washing the dishes. Twenty lines of Latin or you will flunk in class tomorrow. Get your mathematics—forget the needs of your sick sister. Complete! complete! Beat somebody for a place in the upper fifteen percent; to help your neighbor is cheating, and anyway your job is to beat him, not to cooperate with him. Grind your history, tabulate it, and memorize it. Cram it for examination purposes. What care you for the art exhibit, the current social problems, the textile strike? Grind, cram, stuff,—for what? For marks! *marks!* college entrance marks! Marks, not knowledge, is your goal. Marks, and memorized answers which will earn marks, and which will alone get you to college!

Colleges here in the East have pretty definitely controlled secondary school practices up to, and including, the present. It then, the colleges are not now satisfied with the motives and abilities of the students whom they are getting, would it not be wise for them to get out of the way, and to allow those who un-

derstand education of young adolescents the freedom to do the job?

"After all, why is knowledge so highly prized? Surely it is because of its power to throw light upon the problems of human life."⁸ If the statement of the Harvard Student Council Committee on Education is correct, then in the name of purposeful knowledge the junior high school curriculum must not be distorted by the college examination preparatory incubus.

If the colleges wish young men and young women who seek knowledge, who seek answers to meaningful questions, then they should welcome the junior high school, encourage it, and keep their hands off. If the colleges prefer young men and young women who have the desire and the ability to carry our broadly conceived social-civic responsibilities, who engage in wholesome recreations and avocations, who have the desires and habits fundamental to maximum physical efficiency, and who are intelligently preparing themselves for their vocations, then the college will join hands whole-heartedly with those who are responsible for the development of the junior high school. For in this new school are such traits nurtured by precise practices and in social settings.

In the junior high school we find for the first time that the democratic education of all the children at the beginning of adolescence is being purposefully planned.

In a word, the junior high school will make its contribution to the students' success in college and in life, by duplicating the *desirable* experiences of college and of life. And it will do this for all the children of all the people of the community.

⁸Report of Harvard Student Council Committee on Education, Section VII.

Broadening and Finding Courses in Twenty-five Michigan Junior High Schools

BY NIEL C. NIELSEN,

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In 1918 the North Central Association unanimously approved the following declaration of principle: Resolved, that the term Junior High School, as used by this Association, shall be understood to apply only to the schools including the ninth grade combined with the eighth grade or with the eighth and seventh grades in an organization distinct from the grades above and the grades below.

The North Central Association on Secondary schools said, under date of March 1919:

A junior high school is a school in which the seventh, eighth, and ninth grades are segregated in a building (or portion of a building) by themselves, possess an organization and administration of their own that is distinct from the grades above and the grades below, and are taught by a separate corps of teachers. Such schools, to fall within the classification of junior high schools, must likewise be characterized by the following:

1. A program of studies decidedly greater in scope and richness of content than that of the traditional elementary school.
2. Some pupil choice of studies, elected under supervision.
3. Departmental teaching.
4. Promotion by subject.
5. Provision for testing out individual aptitudes in academic, prevocational,

and vocational work.

6. Some recognition of the peculiar needs of the retarded pupil of adolescent age, as well as special consideration of the supernormal.
7. Some recognition of the plan of supervised study.*

The North Central Association in 1918 adopted the following definition and statement of aims:

The junior high school shall normally include the seventh, eighth and ninth years of public-school work. The junior-high-school organization and administration shall realize the following aims and purposes:

1. To continue through its instructional program the aims of public education in a democracy.
2. To reduce to the minimum the elimination of pupils by offering types of work best suited to their interests, needs, and capacities.
3. To give the pupil an opportunity under systematic educational guidance to discover his dominant interests, capacities, and limitations with reference to his future vocational activities or the continuance of his education in higher schools.
4. To economize time through such organization and administration of subjects and courses both for those who will continue their education in higher

*Bulletin, North Central Association, 1919, p. 4.

schools and for those who will enter immediately into life's activities.

In speaking of what the junior high school is, Dr. C. O. Davis says: "the junior high school may be defined as a school unit developed in the United States within recent years and designed to furnish to all pupils between the ages of twelve and fifteen years approximately, (1) continued common education on high elementary levels, and (2) the beginning of a differentiated or secondary education adapted to each pupil's individual needs. By providing a program of studies extensive in scope and by making use of methods of instruction and training that are grounded in the contemporary interests and concrete experience of boys and girls of the early adolescent period, the new school seeks to mediate between strictly elementary school work and methods, and the more specialized contents and processes of the senior high school and of the workaday world. To this end the new educational unit endeavors to organize its activities so as to retain a larger proportion of pupils in the school for a longer period than has been customary in the past; to give them an appreciative notion of the world and its work in all of its diversified forms and in respect to its larger human relationships; to assist them to explore their own capacities, interests, and aptitudes, and to choose, at least tentatively, a course of procedure that gives promise of yielding for them the greatest amount of happiness and, for society, the greatest and most effective service; and, finally, to furnish them such a training program as will function ultimately in the career of their choice. To accomplish this program, the new unit most frequently makes use of grades seven, eight, and nine in the school system*."

It appears therefore that one of the leading aims of the Junior High School is to help early adolescents to discover their elements of strength and weakness and to guide them into life careers in which they will be not only of most service to the world but will also be personally happy and contented. To this end, educators have urged the inclusion in the curriculum of numerous broadening and finding courses. This study seeks to discover to what extent such courses are being offered in one typical state—Michigan—and how exploratory work and guidance are actually being carried on therein. The following questionnaire was prepared and sent to all junior high schools in Michigan—thirty-five in number. Replies were received from twenty-seven of them, but two schools frankly acknowledged that they were not strictly junior high schools and that no exploratory courses were being offered by them. In consequence the data which are here presented have been secured from twenty-five schools.

THE QUESTIONNAIRE

1. Location of school.....
2. Grades included.....
3. Number of pupils enrolled.....
4. (a) Do you give a General Language course?
- (b) In what grade is it offered?.....
- (c) How many times per week does the class meet?.....
- (d) Is it required?.....
- (e) How many pupils are now taking the course?
- (f) What textbook is used?.....
5. (a) Do you give a course in General Science?
- (b) In what grade is it offered?.....
- (c) How many times per week does the class meet?

*Davis, Calvin Olin, "Junior High School Education." Yonkers-on-Hudson: World Book Company, 1924, p. 8-9.

- (d) Is it required?.....
- (e) How many pupils are now taking the course?
- (f) What textbook is used?.....
6. (a) Do you give a course in General Mathematics?
- (b) In what grade is it offered?.....
- (c) How many times per week does the class meet?.....
- (d) Is it required?.....
- (e) How many pupils are now taking the course?
- (f) What textbook is used?.....
7. (a) Do you give a general course in Social Science?
- (b) In what grade is it offered?.....
- (c) How many times per week does the class meet?
- (d) Is it required?
- (e) How many pupils are now taking the course?
- (f) What textbook is used?.....
8. (a) Do you give a general course in Industrial Arts?
- (b) In what grade is it offered?.....
- (c) How many times per week does the class meet?
- (d) Is it required?.....
- (e) How many pupils are now taking the course?
- (f) What textbook is used?.....
9. (a) Do you give short try-out courses?.....
- (b) If so, what?.....
- (c) How many times per week do these meet?
10. (a) Do you give any other specific exploratory course?
- (b) Name
- (c) How many times per week does it meet?
- (d) Is it required?.....
- (e) How many pupils are now taking the course?
- (f) What textbook is used?.....
11. How do you try out or explore the large general interest of pupils in respect to:
- (a) Commercial work?
- (b) Agriculture?
- (c) Home Economics?
- (d) Music?
- (e) Fine Arts?
12. What other ways of trying out or exploring pupils' interests, tastes and aptitudes do you employ that are not curricular in nature?
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Probably most teachers would be interested at the outset in such questions as: How many schools offer exploratory courses? What general courses are offered at the present time? How generally are these courses required? Is there a common practice? Tables I and II were prepared with the view of answering these questions.

Placement Agencies

At its meeting in March the Association authorized its president to appoint a committee of five to make a study of the general problem of the effectiveness of public agencies—both institutional and private—in the placement of teachers in public schools and higher institutions.

Table I. Junior High Schools Offering Exploratory Courses

School	Academic															
	General Language				General Science				General Mathematics				General Social Science			
	Yes	No	R*	E*	Yes	No	R	E	Yes	No	R	E	Yes	No	R	E
Adrian	(1)			yes	x			yes	x		yes		x		yes	
Ann Arbor		x			x		yes		x		yes			x		
Boyne City		x			x		yes			x			(1)			
Detroit:																
Barbour	x		(6)		x		(1)		x		yes			x		
Condon		x			x		yes		x		yes			x		
Foch	(2)				x		yes						x		yes	
Neinas	x			yes	x		yes		x		yes		x		yes	
Sherard	x		(7)		x		yes		x		yes		x		yes	
Flint:																
Emerson	x		yes		x		yes		x		yes		x		yes	
Hamtramck	(3)			yes	(2)			yes	yes	(1)	yes		(2)			
Hancock	(4)		yes		yes		yes			no			x		yes	
Highland Park		x			x			yes		x				x		
Holland	x	(5)	yes		x			yes		x			x		(3)	
Houghton		x			x		yes			x			x		yes	
Ionia		x			x			yes		x			x			yes
Ironwood		x			x			yes	x			no	(4)		yes	
Kalamazoo		x			x			yes	x			no	(5)		yes	
Lapeer		x			x		yes			x			(6)		yes	
Manistique	(8)															
Menominee		x			x			yes	x			no		x		
Midland		x			x		yes			x				x		
Niles		x			x		yes		x		yes			x		
Pontiac	x			yes	x		(3)		x		yes			x		
Sault Ste. Marie	x		yes		x		yes		x		yes		x		yes	
Wyandotte	x		yes		x		yes			x				x		
Ypsilanti		x			x		yes		x		yes			x		

*R.—Required. E.—Elective.

Explanatory Notes—Table I

General Languages

- (1) Adrian—Latin in general course.
- (2) Foch—planning to give general course next fall.
- (3) Hamtramck—To be offered in 1926-27.
- (4) Hancock—Latin and French begin in ninth.
- (5) Holland—Languages—Reading Spelling.
- (6) Barbour—Pupils are assigned course. About one-half of the 7-A classes are assigned the course.
- (7) Sherrard—Required of those in general course.
- (8) Manistique—Seventh and eighth grades departmentalized.

General Science

- (1) Barbour—Required of all except 9-A commercial pupils.
- (2) Hamtramck—Two semester course.
- (3) Pontiac—will be required in 1926-27.

General Mathematics

- (1) Hamtramck—Two year course.

General Social Science

- (1) Boyne City—Taught in connection with civics.
- (2) Hamtramck—Course consists of World History, Problems of Democracy, and American History.
- (3) Holland—"We do not call it a general course. We have a one year course in

citizenship. It is given in the ninth year."—E. E. Fell.

- (4) Ironwood—not a complete course.
- (5) Kalamazoo—Working up our own outline. Present time the course includes World Background, History of American people, and geography.
- (6) Lapeer—World Background in the seventh grade. American History in the eighth grade. Vocational and community civics in the ninth grade.

Of the twenty-five schools, nine report that they have a general language course. Two schools report that such a course is to be offered next semester. However, two of the schools reporting such a course can hardly be credited with giving a General Language course. Holland is apparently offering a course that approaches the idea in part. Adrian offers a course in Latin in the ninth grade. The course is a required course in six schools. One school reports assigning only certain pupils to the General Language course.

General Science is offered in twenty-five schools at the present time. After September, 1926 the course will be re-

quired in seventeen of the twenty-five schools. However, Barbour does not require 9A pupils in the commercial course to take General Science.

We find General Mathematics offered in fifteen schools. Nine of these making it a required course. In one of the nine schools General Mathematics is a two year course.

Fourteen schools report that they offer work in Social Science. In twelve schools the work in Social Science is required. It must not be concluded from this that all the schools offer General Exploratory courses in Social Science. One school teaches the course in connection with civics. Two schools offer particularized courses. Seventh grade pupils are given a course in World Background. Eighth grade pupils are given American History, and ninth grade pupils Vocational and Community Civics, in one school. Superintendent E. E. Fell of Holland says, "We do not call it a general course. We have a one year course in citizenship." One school reports, "It is not a complete course."

Table II. Junior High Schools Offering Exploratory Courses

School	Non-Academic				Short try-out courses				Other Exploratory courses			
	Course in Industrial Arts											
	Yes	No	R	E	Yes	No	R	E	Yes	No	R	E
Adrian	x			yes						x		
Ann Arbor	x		(1)			x				x		
Boyne City		x				x				(1)		
Detroit:												
Barbour	(2)					x				x		
Condon		x			(1)					x		
Foch		x				x				x		
Neinas	x		yes			x				x		
Sherard		x				x				x		
Flint:												
Emerson	yes		(3)		(2)				(2)		yes	
Hamtramck		x			(3)				(3)		yes	
Hancock	yes	(4)	(9)			x				x		
Highland Park		x				x				x		
Holland		x			(4)							
Houghton		x				x			(4)			
Ionia	yes		(5)			x				x		
Ironwood						x				x		
Kalamazoo	x	(6)		yes		x			(5)			yes
Lapeer	x		(8)			x			(6)			yes
Manistique	(7)											
Menominee		x			(5)							
Midland		x				x				x		
Niles		x				x			(7)			
Pontiac		x			(6)				(8)			
Sault Ste. Marie	x		yes			x						
Wyandotte	x		yes			x						
Ypsilanti		x				x						

Explanations:

R.—Required. E.—Elective.

Figures in parentheses refer to the notes which follow.

Explanatory Notes—Table II

Industrial Arts

- (1) Ann Arbor—Only part of the pupils are required to take Industrial Arts course.
- (2) Barbour—Offers course in Household Mechanics to all seventh grade boys. The course is required. Several handy man activities are carried on. There were about 350 boys taking Household Mechanics this semester. The classes meet five times per week. No textbook is used.
- (3) Emerson—Only in the seventh grade.
- (4) Hancock—Wood work for boys only. Cooking and sewing for girls only,

- (5) Ionia—Class meets one double period per week.
- (6) Kalamazoo—"Working out our course."
- (7) Manistique—Seventh and eighth grades departmentalized.
- (8) Lapeer—Required in the seventh and eighth grades. Elective in the ninth.
- (9) Hancock—Required only in the seventh and eighth grades.

Short Try-Out Courses

- (1) Condon—Course in Business Practice. Girls sewing, cooking and home planning.
- (2) Emerson—Ten week courses in:
Boys—Wood work, mechanical drawing,

sheet metal work, electricity work.
Girls—Sewing, cooking and home planning.

- (3) Hamtramck—Ten week courses in:
Mechanical drawing.
Sheet metal.
Wood work.
Machine shop.
Auto shop.
- (4) Holland—Manual Training, Fine Arts,
Mechanical Drawing, Printing.
- (5) Menominee—Household Arts for girls in
three shifts.
Manual Training for boys in four shifts
each year.
- (6) Pontiac—"In a sense our general shop
courses are that we give general wood
shop and general metal shop."

Other Exploratory Courses

- (1) Boyne City—Would like to if circumstances would permit.
- (2) Emerson—Music and Art.
- (3) Hamtramck—Study of vocations.
- (4) Houghton—Junior Business Practice,
wood work, cooking, and sewing.
- (5) Kalamazoo—Junior business training.
- (6) Lapeer—Some pupils allowed to take typewriting.
- (7) Niles—Pupils elect one of the courses.
- (8) Pontiac—Metal shop.

Nine schools report they offer courses in Industrial Arts. In one of the nine schools, only a part of the pupils are required to take the course in Industrial Arts. In another school, the work is confined to wood work only. Barbour reports a course in Household Mechanics in the seventh grade. All the boys are required to elect the course. Kalamazoo reports that they are working out a course in Industrial Arts.

Three schools report short try-out courses in wood work, sheet metal,

electricity, mechanical drawing, et cetera. These are ten week courses. One school reports that their general wood shop and sheet metal shops are in a sense try-out courses with them.

Three schools qualify their reports. One school has manual training, mechanical drawing, printing, and fine arts. One reports courses in household arts for girls in three shifts and manual training for boys in four shifts each year. One school gives a course in Business practice. Nineteen schools reporting offer no try-out courses.

Only six schools offer any courses of an exploratory nature other than those included in questions four through nine inclusive. Emerson and Niles include music and art under this heading. Houghton offers Junior Business Practice, wood work, cooking and sewing. Hamtramck offers one hour per week in the study of vocations. Kalamazoo offers a course in Junior Business Training. In Lapeer, certain pupils are allowed to take typewriting with the exploratory idea in mind. Boyne City school reports that it would like to have some exploratory work if circumstances would permit.

How effectively do the junior high schools explore the interests, aptitudes and capacities of their pupils through the exploratory or broadening courses? Some idea may be gleaned from the number of pupils enrolled in these courses. How many are attending required courses? Tables III and IV were prepared with this idea in view.

Table III. Number of Pupils Enrolled in Exploratory Courses

School	Grades	Enrollment	Academic							
			General Language		General Science		General Mathematics		General Social Science	
			No.	%	No.	%	No.	%	No.	%
Adrian	7, 8, 9	538	89	17	78	15	315	59	490	91
Ann Arbor	7, 8, 9	1000	.....	.....	8th.	(3)	1,000	100	(4)	.....
Boyne City	7, 8	170	.....	.....	69	41	.....	.....	62	36
Detroit										
Barbour	7, 8, 9	1950	(1)	.....	1,825	94	1,950	100	.....	.....
Condon	7, 8, 9	1400	.....	.....	800	57	.....	.....	.....	.....
Foch	7, 8, 9	2239	.....	.....	2,239	100	.....	.....	2,239	100
Neinas	7, 8, 9	860	30	35	860	100	140	16	140	16
Sherard	7, 8, 9	875	240	27	875	100	550	63	875	100
Flint										
Emerson	7, 8, 9	1775	221	12	1,775	100	1,775	100	1,775	100
Hamtramack	7, 8, 9	1600	.....	.....	150	9	.....	.....	.....	.....
Hancock	7, 8, 9	300	110	37	95	32	.....	.....	.....	.....
Highland Park	7, 8, 9	1800	.....	.....	500	28	.....	.....	.....	.....
Holland	7, 8, 9	650	.....	.....	43	7	.....	.....	202	31
Houghton	7, 8, 9	350	.....	.....	60	17	.....	.....	104	30
Ionia	7, 8, 9	388	.....	.....	60	15	.....	.....	57	15
Ironwood	7, 8, 9	876	.....	.....	115	13	614	70	275	31
Kalamazoo	7, 8, 9	550	.....	.....	375	68	450	82	375	68
Lapeer	7, 8, 9	225	.....	.....	60	27	.....	.....	.....	.....
Manistique	7, 8	(2)	.....	.....	.....	.....	.....	.....	.....	.....
Menominee	7, 8, 9	450	.....	.....	350	78	350	78	.....	.....
Midland	7, 8, 9	260	.....	.....	75	29	.....	.....	.....	.....
Niles	7, 8, 9	475	.....	.....	155	33	315	66	.....	.....
Pontiac	7, 8, 9	930	70	8	350	38	930	100	.....	.....
Saulte Ste. Marie	7, 8	347	347	100	177	51	347	100	347	100
Wyandotte	7, 8	340	340	100	137	38	.....	.....	.....	.....
Ypsilanti	7, 8	225	.....	.....	90	40	225	100	.....	.....

(1) About one-half of the 7A's are assigned to the course.

(2) Seventh and eighth grades departmentalized.

(3) All in the eighth grade required to take it.

(4) "No, I am not sure I understand this question."

A study of Table III shows that there are 20,573 pupils enrolled in the twenty-five schools. Of this number 1,447 or 7% are taking General Language; 13,313 or 55% are enrolled in General Science; 8,961 or 44% in General Mathematics; and 6,941 or 34% in Social Science. If the individual school is considered, the number of pupils taking

General Language vary from 8% in Pontiac to 100% in two schools; in General Science from 7% in one school to 100% in four schools; in General Mathematics 16% in one school to 100% in six schools; and in Social Science from 15% in one school to 100% in three different schools.

Table IV. Number of Pupils Enrolled in Exploratory Courses

Non-Academic								
School	Grades	Enrollment	Industrial Arts		Short Try-out Courses		Other Exploratory Courses	
			No.	%	No.	%	No.	%
Adrian	7, 8, 9	538	12	2	....	....	....	....
Ann Arbor	7, 8, 9	1000	(1)	(6)	....	....	....	....
Boyne City	7, 8	170	....	....	....	....	(10)	....
Detroit								
Barbour	7, 8, 9	1950	(2)	....	....	....	(11)	....
Condon	7, 8, 9	1400	....	....	(7)	....	(12)	....
Foch	7, 8, 9	2239						
Neinas	7, 8, 9	860	211	25	....	....	....	....
Sherard	7, 8, 9	875	....	....	....	....	....	....
Flint								
Emerson	7, 8, 9	1775	(3)	....	(8)	....	729 (13)	41
Hamtramack	7, 8, 9	1600			(9)	....	900	56
Hancock	7, 8, 9	300	250	83	....	....	....	....
Highland Park	7, 8, 9	1800	....	....	....	....	....	....
Holland	7, 8, 9	650	....	....	....	....	....	....
Houghton	7, 8, 9	350			....	....	(14)	....
Ionia	7, 8, 9	388	270 (4)	70	....	....	....	....
Ironwood	7, 8, 9	876	....	....	....	....	....	....
Kalamazoo	7, 8, 9	550	70	13	....	....	100	18
Lapeer	7, 8, 9	225	120	53	....	....	20	9
Manistique	7, 8	(5)	....	....	....	....	....	....
Menominee	7, 8, 9	450	....	....	....	....	....	....
Midland	7, 8, 9	260	....	....	....	....	....	....
Niles	7, 8, 9	475	....	....	....	....	55 (15)	12
Pontiac	7, 8, 9	930	....	....	....	....	100 (16)	21
Sault Ste. Marie	7, 8	347	....	....	....	....	....	....
Wyandotte	7, 8	340	340	100	....	....	....	....
Ypsilanti	7, 8	225	....	....	....	....	....	....

Explanatory Notes—Table IV

(1) Only part of the pupils required to take the course.

(2) Household Mechanics for seventh grade boys.

(3) Ten week courses.

(4) One double period per week.

(5) Seventh and eighth grade departmentalized.

(6) See (2).

(7) Business practices. Sewing, cooking, home planning for girls.

(8) See (3).

(9) Ten week courses.

(10) Would like to.

(11) Handyman activities seventh grade boys.

(12) No.

(13) Music and Art.

(14) Junior Business Practices, woodwork, cooking, and sewing.

(15) Pupils have choice of electives.

(16) Sheet metal shop.

Only 1,273 or about 6% of all the pupils enrolled in the junior high are found in Industrial Art Courses. Under "Other Exploratory Courses" we find 1,904 or 9% of the pupils enrolled in the different courses. Considering the situation in the individual schools, the enrollment in these courses ranges from 13% to 100% in the Industrial Art

Courses. In only one school are more than 56% of the pupils exposed to any other exploratory course than those included in the questionnaire.

S. M. Glass, formerly State Inspector of Junior High Schools in Pennsylvania, in formulating a plan for guidance, suggested that in the low seventh there should be a period of adjustment, in high seventh and low eighth there should be a period of exploration and preview, in high eighth there should be provisional choice of electives, and the ninth year should be a year of stimulation.

If these suggestions are accepted as standards how do the conditions in the junior high schools in Michigan measure up to the ideal? Is there any general practice followed among the junior high schools in Michigan? If not, what seems to be the tendency?

In Tables V and VI the writer gives the grades in which these exploratory and try-out courses are offered in the different junior high schools.

Table V. Grades in Which Academic Exploratory Courses Are Offered

School	General Language	General Science	General Mathematics	General Social Science
Adrian	9	9	7-8	7-8-9
Ann Arbor .....	.....	8	7-8	.....
Boyne City .....	.....	8	.....	8
Detroit:				
Barbour	7A	7-8-9	7-8-9	.....
Condon .....	.....	7-8	9	.....
Foch .....	.....	7-8-9	.....	7-8-9
Neinas	8	7-8-9	9	9
Sherard	8	7-8-9	9	7-8-9
Flint:				
Emerson	8B	7-8-9	7-8-9	7-8-9
Hamtramck	8	8-9	7-8	7-8-9
Hancock .....	.....	8	.....	9
Highland Park .....	.....	8	.....	.....
Holland	7-8	9	.....	9

Houghton	8-9	.....	8-9
Ionia	9	.....	9
Ironwood	7-8B	7-8 B	7A
Kalamazoo	7-8	7-8-9	7-8
Lapeer	8	.....	7-8-9
Manistique .....	.....	.....	.....
Menominee	7-8	7-8	.....
Midland	8	.....	.....
Niles	8	7-8	.....
Pontiac	8B	8-9	7-8
Sault Ste. Marie	7-8	8	7-8
Wyandotte	7-8	8	.....
Ypsilanti .....	.....	7-8	.....

Five schools offer General Language in grades 8B or 8A, or both. In three schools General Language is offered in both the seventh and eighth grades. In one school the course is given only in the 7A grade. At Adrian, Latin is offered in the ninth grade for pupils taking the general course. It could hardly be considered as a General Language course, though the methods may differ somewhat from those of the traditional course in Latin.

General Science is taught in the eighth grade in ten different schools. Three schools give it in the ninth grade, three in the seventh and eighth and one in the seventh and 8B grades. Three schools offer General Science in the eighth and ninth grades. Five schools spread the work over a period of three years.

General Mathematics is offered in the seventh and 8B grade in one school, in grades seven, eight, and nine in three schools, and in grade nine in three schools.

In the case of Social Science, there seems to be no such general tendency in the matter of the grade in which the work is offered. Six schools offer Social Science in the seventh, eighth, and ninth grades. However, two of these schools, Hamtramack and Lapeer, report a particularized course for each of the three years. Therefore these schools could

hardly be credited with a general Social Science course. Kalamazoo and Sault Ste. Marie offer Social Science in the seventh and eighth grades. Kalamazoo reports they are "working up their own outline" in Social Science. At the present time the course includes World Background, History of the American People and Geography.

Four schools offer the course in the ninth grade. In the case of Holland it consists only of a year's work in citizenship. Superintendent Fell says, "We do not call it a General Social Science course." One school offers a one semester course in the 7A grade. One school offers a course in the eighth grade. One school offers Social Science in the eighth and ninth grades.

Table VI. Grades in Which Non-Academic Exploratory Courses Are Offered

School	Industrial Arts	Short Tryout Courses	Other Exploratory Courses
Adrian	9	.....	.....
Ann Arbor.....	(1) 7-8	.....	.....
Boyer City.....	.....	(4)	(7)
Detroit:			
Barbour .....	.....	.....	(8)
Condon .....	.....	9	(9)
Foch .....	.....	.....	.....
Neimas	7	.....	.....
Sherard .....	.....	.....	.....
Flint:			
Emerson	7-8-9	(b) 10 wks.	(10)
Hamtramck .....	.....	(5) ?	(11)
Highland Park.....	.....	.....	.....
Holland .....	.....	.....	.....
Houghton .....	.....	.....	.....
Ionia	7-8	.....	(12)
Ironwood .....	.....	.....	.....
Kalamazoo	(2) 8	.....	.....
Lapeer	(3) 7-8-9	.....	.....
Manistique .....	.....	.....	.....
Menominee .....	.....	.....	.....
Midland .....	.....	.....	.....

Niles .....	.....	(13)
Pontiac .....	.....	(6)
Sault Ste. Marie	7-8	.....
Wyandotte	7-8	.....
Ypsilanti .....	.....	.....

- (1) Required in the seventh and eighth grades.
- (2) Working out our course.
- (3) Required in the seventh and eighth grades. Elective in the ninth grade.
- (4) Would like to if circumstances would permit.
- (5) Ten week courses.
- (6) General shop courses considered try-out courses.
- (7) See (4).
- (8) Household Mechanics for seventh grade boys.
- (9) Most Shop courses ten weeks. Auditorium work twice per week in the seventh grade and once in the eighth and ninth grades.
- (10) Music and Art.
- (11) Study of vocations.
- (12) Junior Business Practice, work work, cooking and sewing.
- (13) Pupils choice of electives.

Fewer schools offer general courses in Industrial Arts or short try-out courses. In two schools, Industrial Arts courses are offered in grades seven, eight, and nine. Four schools give the courses in grades seven and eight. Three schools offer the work in grades seven, eight, and nine respectively. Hancock offers wood work for boys only. Kalamazoo reports the course in the formative stage.

In the matter of short try-out courses, only Emerson, Hamtramck and Sherard report ten week try-out courses in their schools. Pontiac considers their General Shop work as try-out courses. While this may be true, the courses cannot be considered as "short" try-out courses. Condon reports short try-out courses in Business Practice in the ninth grade. Boyne City offers Manual Training and Domestic Science. Holland lists Manual Training, Fine Arts, Mechanical

Drawing and Printing as short try-out courses in their junior high school. Menominee is the only school which reports the practice of "shifts" in Household Arts and Manual Training as short try-out courses.

How much time is devoted in the junior high school to exploring the interests and aptitudes of the pupils? How many periods per week are devoted to exploratory courses?

Tables VII and VIII show the number of periods per week the different courses are offered in the various schools.

Table VII. Number of Periods Per Week for Academic Exploratory Courses

School	General Language	General Science	General Mathematics	General Social Science	Total No. of Periods per Week
Adrian (1)	5(1)	5	5	5	20
Ann Arbor		5	5	...	10
Boyne City		5	...	5	10
Detroit:					
Barbour	5	2	3	...	10
Condon		2	3	...	5
Foch		3	...	5	8
Neinas	5	2	4	5	16
Sherard	5	2	5	5	17
Flint:					
Emerson	5	3	5	5	18
Hamtramck	5	5	5	...	15
Hancock	5	4	...	5	14
Highland Park		5	...	...	5
Holland		5	...	5	10
Houghton		5	...	5	10
Ionia		5	...	5	10
Ironwood		7	5	5	17
Kalamazoo		3	5	5	13
Lapeer		3	...	...	3
Manistique (2)					
Menominee		5	5	...	10
Midland		5	...	...	5
Niles		2½	5	...	7½
Pontiac	5	2 or 3	5	...	12 or 13
Sault Ste. Marie	5	5	5	5	20

Wyandotte	5	5	...	...	16
Ypsilanti		3	4	...	7

(1) New course in Latin rather than a General Language course.

(2) Seventh and eighth grades departmentalized.

General Language is given five times a week in every school offering such a course. The same thing is true for the work in General Social Science. The general practice seems to be to give General Mathematics five periods per week. Barbour and Condon offer it three times a week. Neinas and Ypsilanti four periods a week.

In the case of Social Science there seems to be no such uniformity of practice among the schools. The number of periods range from two to seven periods per week. One school offers it for seven periods per week, one for four periods, eleven for three periods or less, and twelve for five periods per week.

Eighteen schools devote ten or more periods per week to exploratory work. Four schools have five periods or less per week.

Table VIII. Number of Periods Per Week for Non-Academic Exploratory Courses

School	Industrial Arts	Short Try-Out Courses	Other Exploratory Courses	Total No. of Periods per Week
Adrian	5	...	...	5
Ann Arbor	5	...	...	5
Boyne City .....		...	...	...
Detroit:				
Barbour .....		...	...	...
Condon		5	...	5
Foch .....		...	...	...
Neinas	4	...	...	...
Sherard .....		...	...	...
Flint:				
Emerson	5	5	2	12

Hamtramck	4	1	5
Hancock (1)	1 or 5	....	5 or 6
Highland Park .....	....	....	....
Holland .....	....	....	....
Houghton	5	....	5
Ionia (2)	1	....	....
Kalamazoo	5	....	5 10
Ironwood .....	....	....	....
Lapeer	2	....	5 7
Manistique (3) .....	....	....	....
Menominee .....	....	....	....
Midland .....	....	....	....
Niles .....	....	2	2
Pontiac .....	....	....	....
Sault Ste. Marie	1	....	....
Wyandotte	1	....	....
Ypsilanti .....	....	....	....

(1) Woodwork for boys; cooking and sewing for girls.

(2) One double period per week.

(3) Seventh and eighth grades departmentalized.

Table VIII shows that three schools offer work in Industrial Arts one period per week. In one school the classes meet for one double period per week. One school gives it two times per week and another four times. Four schools offer the work five periods per week.

Only four schools reported having short try-out courses. One of these offer the courses four times per week. In the other schools the classes meet five periods per week.

What other ways of trying out or exploring pupils' interests, tastes, and aptitudes do you employ that are not curricular in nature? Five schools responded that the number of periods devoted to the work was as follows: one school one period; two schools two periods; and two schools five periods per week.

When we consider the total number of periods per week devoted to the broadening and finding courses we find the conditions as shown in Table IX.

Table IX. Distribution of Time in Exploratory Courses

Number of Periods per Week	Number of Schools	Number of Periods per Week	Number of Schools
20	2	14	1
18	1	12-13	2
17	2	10	8
16	1	7-8	3
15	1	3-5	4

In this study the writer has thought of Commercial work, Agriculture, Home Economics, Music and Fine Arts, as representing the larger general interests. To ascertain how the junior high schools were exploring the interests of the pupils in respect to this work, it was thought best to ask "How do you try out or explore the larger general interests of pupils in respect to: Commercial work, Agriculture, Home Economics, Music, Fine Arts?" Table X shows the proportion of schools that are attempting to explore these larger interests.

Table X. Schools Exploring the Larger General Interests of Pupils

School	Commercial Work	Agriculture	Home Economics	Music	Fine Arts
Yes	11	3	12	18	10
No	15	23	14	8	16

Music leads the list with eighteen schools. Home Economics, Commercial work, and Fine Arts with twelve, eleven and ten schools respectively. In only three schools are there any efforts being made to explore the interests of the pupils in such basic industry as agriculture. In two of these schools this is done incidentally through the General Science work. One school offers agriculture as a means for exploring the pupils interests in farming.

The question of how the various schools explore these general interests is

of course a very important matter. Table XI shows the means or activities through which this broadening or finding work is done. It also shows the number of schools in each instance.

Table XI. How the Junior High Schools Explore These Large General Interests

INTERESTS THROUGH WHAT ACTIVITIES SCHOOLS

Commercial work:

Incidentally through regular arithmetic work	1
In regular commercial work.....	1
Elective subjects (Commercial)	2
Typewriting	2
Junior Business Training course.....	2
Business practice courses	3

Agriculture:

Incidentally through General Science.....	2
Regular agriculture and nature study.....	1

Home Economics:

Cooking and sewing classes.....	8
Practical arts	1
Elective for ninth grade girls.....	1
Required of all seventh and eighth grade girls	2

Music:

Regular class work—2 periods per week....	7
Regular class work—2 periods per week....	1
Entertainment, concerts, and auditorium....	2
Required of all 7th grade pupils.....	1
Required of all 7th and 8th grade pupils....	1
Required of seventh and eighth grade pupils	2
Instrumental music—elective	1
Band and orchestra—credit work.....	1
Orchestra work	1
Music required of all—one period per week	1

Fine Arts:

Incidentally through Art work.....	1
Regular classes	4
Poster contests—seventh grade .....fu.....cg	
Required—seventh grade	1
Elective—seventh and eighth grades, two periods per week	1
Required of seventh and eighth grades.....	2

The cooking and sewing classes are the activities in eight schools for exploring interests in Home Economics. Only two

schools have listed work in Home Economics as a prescribed course. Regular class work in music serves in a similar manner to explore the pupil's interests in eight different schools. Five schools require all pupils to take some music. One in the seventh grade; one in the eighth grade; two in the seventh and eighth grades; and one requires all pupils to take one period per week. Entertainment, concerts, auditorium work, band, orchestra, and instrumental music fair about equally well as activities for exploring pupils interests.

Whatever is done in Fine Arts in eight different schools is done in the regular art class. Three schools require that the work be taken at some time. In one school the only exploratory work that is done is incidental. Another school reports that the work is done through poster contests, et cetera.

In the field of commercial work each activity is found in about the same number of schools. However, junior business training courses and business practices courses are given in two and three schools respectively. Two schools offer commercial subjects as electives for the purpose of exploring the interests of the pupils.

What use is being made of textbooks in the exploratory courses in the twenty-five junior high schools?

Table XII. Schools Using Textbooks in Exploratory Courses

Course	Schools Offering Course	Schools Using Textbook	Schools Reporting Use of Outlines	Schools Using No Textbooks
General Language	12	7	3	1
General Science	25	23	1	---
General Mathematics	15	14	---	---
General Social Sciences..	14	13	1	---

Industrial Arts	12	6	3
Short Try-out Courses....	6	1	2
Other Exploratory Courses	7	3	2

The questionnaire shows that twenty-three schools make use of textbooks in the General Science course. One school uses an outline only. Textbooks are used in all schools offering General Mathematics. In the case of Social Science textbooks are used in all but one school offering a course. This school uses an outline. In General Language seven schools use a textbook, three use a special outline prepared by the educational staff, and two schools report the use of no text or outline.

In the non-academic courses the study shows fewer textbooks used in proportion to the number of schools offering this kind of work. Four schools report the use of textbooks. Outlines are used in six schools in the Industrial Art courses, in two schools in short try-out courses, and in two schools in other exploratory courses. The number of schools using no textbooks in these courses are three, one and three respectively. Textbooks are used in one school in the short try-out courses and in three schools in other exploratory courses.

What textbooks are used in the exploratory courses in the junior high school? A summary was made of the replies to this question. Table XIII indicates the relative frequency of each textbook as well as the names of the textbooks used.

Table XIII. Textbooks Used for Exploratory Courses

COURSE	AUTHOR	TITLE	USED IN
General Language:			
	Leonard-Cox—General Language		3
	Board of Education—Outline.....		3
	Collar-Daniel—First Year Latin.....		1
	D'Ooge—Concise Latin Grammar.....		1

COURSE	AUTHOR	TITLE	USED IN
	Hitchcock—Junior High Literature.....		1
	Spaulding & Bryce—Aldine Book III.....		1
General Science:			
	Caldwell-Eikenberry—Elements of General Science		6
	Van Buskirk-Smith—The Science of Everyday Life		4
	Trafston—Science of Home and Community		3
	Trafston—Biology of Home and Community		3
	Pieper & Beauchamp—Everyday problems in Science		3
	Hunter-Whitman — Civic Science in the Community		2
	Snyder—Everyday Science		3
	Tower-Lunt—Science of Common Things..		2
	Webb-Dodcock—Early Steps in Science....		3
	Hessler—First Year of Science.....		1
	Hodges—Nature Study and Life.....		1
	Winslow—Health Living		1
	Prevention of Disease.....		1
	Board of Education—Outline.....		1
General Mathematics:			
	Schorling-Clark—Modern Mathematics.....		3
	Rugg-Clark — Fundamentals of High School Mathematics		4
	Wentworth-Smith-Brown — Junior High School Mathematics		3
	Hart-Watts — Commercial and Industrial Arithmetic for Students of High School Age		1
	Lindquist—Modern Arithmetic Methods and Problems		1
	Bonser-Pickell-Smith—Practical Mathematics for Junior High School.....		2
General Social Science:			
	Hughes—Community Civics Citizenship.....		4
	Beard-Bagley—The History of the American People		4
	Elson—Modern Times and the Living Past ..		2
	Hill—Community Civics		2
	McMurray-Parkins—Advanced Geography ..		2
	Marshall—Human Progress		2
	Board of Education—Outline		1
Industrial Arts:			
	Board of Education—Outlines		6
Short Try-out Courses—			
	Cody, S.—Business Practice Series.....		1
	Cody, S.—Business Practice in Elementary Schools		1
	Board of Education—Outline		2

Other Exploratory Courses:

Dunn—Junior Songs	1
Board of Education—Outline	2
Board of Education—Pamphlets.....	1
Kirk-Waesche—Junior Training for Modern Business	1

Realizing not only the possibility but also the probability of some junior high schools doing a piece of broadening and finding work quite out of the ordinary, question number ten was included in our questionnaire, namely: Do you give any other specific exploratory course? Eighteen schools did not give other exploratory courses than those included in our questionnaire. The replies received were as follows:

Adrian—No.

Ann Arbor—No.

Boyne City—"We do not. We try to make our manual training, domestic science, social science, English and general science. We try to be extensive rather than intensive."

Detroit:

Barbour—No.

Condon—No.

Neinas—No.

Sherard—No.

Flint:

Emerson—Music and Art.

Hamtramck—Vocations, study of.

Hancock—No.

Holland—No.

Houghton—Business practice, wood working, cooking, and sewing.

Ionias—No.

Ironwood—No.

Kalamazoo—Junior Business Training.

Lapeer—Typewriting.

Manistique—No.

Marquette—No.

Menominee—No.

Midland—No.

Niles—Art and Music—Pupils must elect one.

Pontiac—Metal shop work—Number of periods vary with the grade. Classes meet two times a week in the 7A grade.

Sault Ste. Marie—No.

Wyandotte—No.

Ypsilanti—No.

Probably one of the finest opportunities which the junior high school can offer for broadening and finding the interests and aptitudes of the boys and girls is through club organizations, pupil participation and other extra curricular activities. Table XIV contains the information gathered from the answers given by the different schools to question number twelve—What other ways of trying out or exploring pupils' interests, tastes and aptitudes do you employ that are not curricular in nature?

Table XIV. What Other Ways of Trying Out or Exploring Pupil's Interests, Tastes and Aptitudes Do You Employ That Are Not Curricular in Nature?

SCHOOL	ACTIVITIES
Adrian	"We let pupils elect any subject offered as an elective in the 9th grade."
Ann Arbor	No report.
Boyne City	Tests. Personal consultation by Home Room Teachers.
Detroit:	
Barbour	No report.
Foch	No report.
Neinas	No report.
Sherard	No organization—no counselors yet.
Flint:	
Emerson	Band, school organizations, clubs, chorus, orchestra.
Hamtramck	Band, orchestra.
Hancock	Intramural basketball, spring tournament. Declamation contest, pupil participation in general assembly programs, interclass debates.
Highland Park	No report.
Holland	Debating clubs, Music clubs, Art clubs.
Ionias	No report.
Ironwood	Home room activities, club work. "We have try-out courses listed on our program of studies. Courses have not been put in operation be-

	cause of administrative difficulties.
Kalamazoo	Club organizations.
Lapeer	Junior Commercial club, Dramatic club, Junior Home Economics club, Junior Science club, Literary club, Debating clubs.
Manistique	No report.
Menominee	No report.
Midland	Dramatic club, Civics club, Glee club, Nature Study club, Science club, Student council, Vocational conferences by the principal and two other teachers.
Niles	Band, Glee club, Orchestra.
Pontiac	No report.
Sault Ste. Marie	Art work. School paper — "The Broadcast."
Wyandotte	No report.
Ypsilanti	No report

Table XV shows the frequency of the different non-curricular activities which afford opportunities for pupil participation and means for trying out or exploring pupils' tastes, interests, and aptitudes in seventeen different schools. (1)

Table XV. Frequency of Non-curricular Activities

ACTIVITIES	FREQUENCY
Band	2
Orchestra	2
Music club	1
Chorus	1
Literary club	1
Dramatic club	1
Interclass Debates	1
Declamation contests	1
Debating clubs	2
Art clubs	1
Clubs	3
Junior Commercial Club.....	1
Junior Home Economics Club.....	1
Assembly programs	1
School organization	1
Home Room Activities	1

Spring Tournament	1
Intramural Games	1
Tests	1
Counseling	1
Choice of Electives (2).....	1
(1) Eight schools made no report.	
(2) Choice of electives in the ninth grade.	

FINDINGS AND COMMENTS

The writer is fully aware of the limitations of this study due to the questionnaire method of collecting data. However, certain conclusions are warranted on the basis of the data submitted by the schools which returned the questionnaire.

General Science is offered in all the schools. However, eight of the schools do not require their pupils to take the course. General Mathematics and Social Science are offered in fifteen and fourteen schools respectively. Eighty per cent of the schools require the pupils to take the work in both courses. General Language, which is more or less a new thing, is or will be offered in nine schools by September, 1926. Two other schools report that they offer such a course. The writer has not included these because the courses are not strictly General Language courses. It is clearly seen that the schools are making the best showing in General Science so far as offerings go. When it comes to requiring the course, the showing is not as good as either that of General Mathematics or Social Science. In the case of Social Science a number of schools are giving particularized studies rather than a general course. Considering the fact that the General Language course is of so recent a date, the situation is highly gratifying. However, it would seem to the writer than there is room for improvement in general in the present situation.

When we come to the non-academic courses, the situation is far different from what we found in the case of the academic courses. Only eleven schools offer any work in the Industrial Arts. Six schools will have short-try-out courses by September, 1926. In one or two of the schools the work is very limited. Because there is some overlapping in the data submitted through the questionnaire, Table XVI has been included in the section 'Findings and Comments.'

Table XVI. Frequency of Exploratory Courses

DEPARTMENT	COURSE	FREQUENCY
Commercial:		
	Business Practice	5
	Elements of Bookkeeping.....	1
	Typewriting	3
Home Economics:		
	Household Arts	1
	Home Economics	1
	Domestic Science	1
	Cooking	8
	Sewing	8
	Household Mechanics (1)	1
	Home Planning	1
Vocational Guidance:		
	Use of Tests	1
	Study of Vocations	1
	Personal Conferences	1
Industrial Arts (2):		
	General Shop	3
	Machine Shop	2
	Metal Shop	3
	Auto Shop	1
	Pattern Making	1
	Electricity	1
	Wood work	4
	Manual Training	5
	Mechanical Drawing	5
	Drawing	1
	Printing	2
Music and Fine Arts—		
	Music	18
	Art	10
(1) Seventh and eighth grade boys.		

(2) Nine schools offer general course in Industrial Arts.

An analysis of the contents of Table XVI leads one to query, "Are the junior high schools measuring up to their opportunities?"

A quantitative analysis of Table III reveals a startling situation. Only 7% of all the pupils in the twenty-five schools are introduced to a General Language course. The significance of this becomes more real when we consider the fact that only four schools enroll 35% or more of their pupils in the General Language course. In General Science which is offered in every single school, 55% of the pupils are exposed to the course. In General Mathematics and Social Science, 44% and 34% of the pupils respectively are attending these courses. It would seem to the writer that the number of schools offering these courses should not be taken as the sole criterion in measuring the degree that the junior high schools are functioning as exploratory schools. This is especially true when we realize that in a subject like General Science only 55% of the pupils are receiving instruction in the subject. The small percentage in the different exploratory courses would seem to suggest that the junior high school is largely a school of the traditional type outside of a few of the larger cities.

Fewer than twenty percent of our junior high school boys and girls receive any instruction in Industrial Arts, short-try-out courses, or other exploratory courses. Allowing for the schools that failed to submit figures, it would seem that far too small a number of our boys and girls are offered any opportunities for finding their interests, tastes, and aptitudes in the non-academ-

ic activities under careful guidance and instruction.

Principal Glass suggested that high seventh and low eighth be made a period of exploration and preview. There exists a tendency among the schools to make the seventh and eighth grades appear more frequently than any other year or combination of years as a period for exploratory courses. Table XVII shows the frequency of the grade or combination of grades for offering exploratory courses.

Table XVII. Frequency-Exploratory Period

Academic		Non-Academic	
YEAR	FREQUENCY	YEAR	FREQUENCY
7	0	7	1
7A	2	7-8	4
7-8B	2	8	1
7-8	16	7-8-9	3
8B	2	9	2
8	14		
7-8-9	14		
8-9	4		
9	11		

How many periods per week are the exploratory courses offered? There exists a general tendency among the schools to offer the different courses five times a week. This is true without an exception in General Language and Social Science. This is true in the case of General Mathematics except in two schools where they give it three times a week and in two others where they give it four times a week. There is no uniformity for General Science. Here we find twelve schools offering it five times a week, eleven schools offering it from two to three times a week, one school offering General Science four times a week and one seven times a week. It should be noted that the schools offering it fewer than five periods per week offer General Science for more than one

year, except for three schools.

The numbers of schools exploring the larger interests of pupils in the Fine Arts, Home Economics, and Commercial work, are about equal. More than 50% of the schools are doing nothing in the way of exploring the pupils' interests in these fields.

Only one school in twenty-five is making any direct effort to acquaint the pupils with Agriculture. Two are doing it incidentally through General Science. One may well question such a situation.

Music receives attention in a larger number of schools than any of the other interests. It would seem, however, that music merits a place in more than eighteen schools.

Some interesting facts are seen in Table XII. Textbooks are used as a basis for the work in General Science, General Mathematics, and Social Science work in practically every school offering the work. The use of outlines is quite general in the newer courses such as General Language and Industrial Arts. This is perhaps what we might expect. However, seven schools are using a text in General Language at the present time.

It would appear from Table XIII that no one textbook has a monopoly in any introductory course. The greatest variety of textbooks in use is in General Science. Twelve different textbooks are in use. An Outline of General Science prepared by the staff is used in one school. Caldwell and Eickenberry is used more frequently than any other text. VanBuskirk-Smith holds second place. Trafston, Pieper and Beauchamp tie for third place.

The use of 'Outlines in General Language' shares the honors for first place with Leonard-Cox text in General

Language. Most of the other textbooks are indicative of particularized subjects.

In General Mathematics, Rugg-Clark; Schorling-Clark, and Wentworth-Smith-Brown texts are used with about the same frequency. The Hart-Watts and Lindquist texts are used in one school in each case.

It would appear from the nature of the textbooks used in Social Science, that the work consists more or less of particularized subjects with one or two exceptions. It appears that Beard-Bagley and Hughes are used an equal number of times. Elson's "Modern Times and The Living Past," and Marshall's "Human Progress" are each used in two different schools. Hill's "Community Civics" and McMurray-Parkin's "Advanced Geography" are used in two schools in each instance.

Only outlines are used in Industrial Arts. This may be explained by the fact that there is no text extant. There seems to be no tendency or uniformity in the case of short-try-out courses or other exploratory courses. For this reason, it would seem that the situation merits no particular comment.

But one conclusion is warranted in the light of the facts presented in Table XV. It can hardly be said that the junior high schools are in general taking advantage of the great opportunities afforded them through extra-curricular activities. The total frequency of all activities reported is twenty-six. Obviously many junior high schools are doing little or nothing for pupil participation in work of this kind.

SUMMARIES AND CONCLUSIONS

1. A study of the views held by a number of the leaders in the field of junior high school education reveals al-

most a complete agreement as to the aims and special functions of the junior high school. Foremost among these is pupil exploration.

2. There are a number of reasons why the junior high school should offer exploratory courses and such broadening and finding work is of paramount importance.

3. The junior high school should offer many opportunities for pupil participation in the things the boys and girls are interested in.

4. School men generally should have a better understanding of what exploratory, broadening, and finding courses are, and how extra-curricular activities are designed to function in the junior high school.

5. The number of boys and girls exposed to exploratory courses in general language, general science, general mathematics and general social science is comparatively small.

6. There is a tendency among the schools offering exploratory courses to emphasize the work in the eighth year.

7. The general practice seems to be to offer each course five periods per week in General Language, General Science, General Mathematics, and General Social Science, provided these courses are offered at all.

8. The practice is less uniform in the case of the non-academic work.

9. The larger general interests of the pupils in Commercial work, Agriculture, Home Economics, Music and Fine Arts are not receiving anything like general attention.

10. The use of textbooks, or specially prepared outlines, is quite general. Few schools, however, report the use of more than one text in a course.

11. The activities of the twenty-five junior high schools in exploring the pupils' interests, tastes, and aptitudes in things not curricular in nature is a bit discouraging.

12. Some schools failed to report any extra-curricular activities. Where such is the case, one may well question just how conscious the junior high school is of its aim and special function as an exploratory school in the community.

13. The short try-out courses with

their broadening and cultural effects, as well as their integrating effect in a democracy, are sadly neglected in a large number of the schools.

14. In spite of the fact that there is room for considerable improvement in general, the tables in this study show that a number of the junior high schools are offering enriched programs of study and that the broadening and finding powers of these schools are approaching an ideal situation.

Resolution on Professional Training

At the March meeting, the following resolution presented by Dean John S. Nollen, Grinnell College, was approved:

"Moved that the Commission on Unit Courses and Curricula be requested to initiate an investigation of the general problem of the professional training of secondary school teachers, including a study of typical domestic and foreign methods, with a view, first, to determining whether and to what extent graduate instruction should supplement or be substituted for the present system of undergraduate teacher training courses.

"Second, to securing for prospective teachers the benefits of effective practice teaching under competent direction.

"Third, to indicating a procedure that may bring about more uniformity in the minimum legal requirements of the various states in the North Central territory with reference to the professional training of teachers."

Pushers and Pullers

An Experiment in Mass Competition in a Six Year High School

BY H. B. HEIDELBERG, CLARKSDALE, MISSISSIPPI

For the four years, prior to 1926, the Clarksdale High School of Clarksdale, Mississippi, a small city of 8,000 people, has participated in the Mississippi Delta Regional High School Meet. The first year Clarksdale won the cup; the second year Clarksdale and a neighboring city tied; the third year another city in the region won it, and the fourth year, 1925, Clarksdale won it again.

Our participation in the Delta High School Regional Meets brought to us the following advantages:

1. A stimulus to the star pupils and athletes to do the best work of which they were capable, in order to have the privilege of representing the school, and to win the contests in competition with other schools in the district.

2. A stimulus to the teachers and the athletic coach to exert maximum efforts in training contestants for the meet.

3. An incentive to the local school spirit, and pride in the accomplishments of our school in competition with other schools.

However, the following disadvantages became very evident to all members of the faculty:

1. A literary contest in which only one pupil represented the school in no sense was a true index to the accomplishments of the entire class represented by one contestant, since it is entirely possible to have one pupil of unusual ability and attainments in a class, which, as a whole, may be doing inferior work.

2. Since the contestants in literary events for a considerable period of time prior to the date of the final contests received intensive coaching and instruction in order to compete successfully with contestants receiving the same treatment from their instructors in other schools, their teachers' time was unwisely and unfairly diverted from the slower pupils who needed extra time and attention.

3. Athletic contestants in track work received the lion's share of the coach's time, at the expense of the mass of the students who were entitled to receive a generous share of his time and attention.

4. There was no incentive, furnished by competition, for better classwork and for wider participation in athletics for the mass of pupils with average or inferior ability.

5. The winning or losing of the Regional High School Meet was a fictitious yard-stick by which the efficiency of the school was measured.

A frank confession on the part of all the high school teachers, including the principal and the superintendent, revealed the unanimous opinion that the game was not worth the candle, and that an immense amount of time was being unjustly and improperly diverted from the mass of average and inferior pupils for the benefit of the few stars who were supposed to furnish for the contests in the Regional Meet the standards of class-work and athletic prowess

prevailing in the classroom, or on the athletic field.

It was thereupon decided by unanimous vote of the faculty that the interests of the local school would be better subserved if something else could be devised which would bring a greater degree of pupil-participation in both literary and athletic contests. A committee was appointed to work out such a plan.

After several night meetings of the committee, such a plan was devised and submitted to the faculty for approval. The faculty indorsed the work of the committee and voted that it be submitted to the student council and student body for approval. After receiving the sanction of the student council, the plan was fully discussed at the next assembly period by members of the council, representatives of the faculty, and members of the student body. After a very vigorous and heated discussion by the boy and girl leaders, the student body, which consists of junior and senior high school students, about six hundred in number, voted to adopt the plan and to withdraw from participation in the Delta Regional Meet for the year 1926.

The principal features of the plan adopted and executed were as follows:

The entire student body was divided at the beginning of the second term into two contesting groups, approximately equal in number and ability. This was done by selecting two students in each home room, as captains, to make alternating selections of their fellow-students for the two opposing groups. Subsequent events demonstrated the excellent judgment exercised by the captains in their estimates of the abilities of their class-mates. Each captain was charged with the responsibility of leadership of his group in his room.

The students were then given the privilege of selecting appropriate names for the two contesting groups. Suggested names were written on slips and turned over to a committee of students to select the three pairs of names which they considered best. After the committee had made their selections, they were submitted to the entire student body in general assembly for first choice. After considerable discussion and balloting, the rival forces voted to array themselves for the struggle under the opposing banners of the *Pushers* and the *Pullers*, every individual of whom would participate in some of the contests to be staged during the ensuing period of approximately three months.

The contest was made preeminently and distinctively a *group* contest and *not* an individual contest. No prizes or distinctions were offered to any single student who might excel his fellow students. The basic principle on which the contest was placed was the *subordination of the individual to the group*.

The contest was placed on a point basis, by which each group event of an athletic or platform character was accorded a certain number of points, the grand total of which ran into the thousands. In order to exalt the day's work in the classroom and thus emphasize the importance of the daily recitation, approximately two-thirds of the possible points to be won were through tests given in every subject of the entire school curriculum of the junior high school and the senior high school. The tests were uniform in number of questions and were based on the regular classroom work covered during the three month period, following the beginning of the second semester. A student making a perfect score on each of his tests

could earn for his side a maximum of 50 points. Each test paper was graded on the basis of 50 as a perfect score. The total number of points which he might earn for his side was represented by the average of his scores on all of the subjects on which he was tested. For example, if his score on English was 45, on Latin 40, on Algebra 35, and on history 40 (using 50 as a perfect score, or grade), the points which he, as an individual student, Tom Jones, contributed were equal to the average of these four scores, or 40 points. The tests were given one week before the final day, thus giving sufficient time for the grading of all test papers and the computation, recording and tabulation, by groups, of the individual points made by the six hundred contestants.

The athletic events were distributed, according to schedule, throughout the contesting period of approximately three months. Opportunity was given to the *Pushers*, both boys and girls, of each class, to practice, choose a team and play against the *Pullers* of the *same class* in basket-ball, indoor base-ball, tennis and soccer. Each game was weighted with a definite number of points. During the basket-ball period, six boys' games and six girls' games were played, each game being played by opposing teams from the same class. Besides the team which represented the school in inter-scholastic games, which are not included herein, twenty-four basket-ball games, involving approximately 125 contestants, of various sizes and ages, participated in the contest, and received definite training and experience. The older students, who knew the game, assisted the athletic supervisors in giving training to the teams of their respective groups in the junior high school grades. Altogether, a very

large number of games in basket-ball, indoor base-ball, tennis and soccer were played off prior to the final Rally Day. The schedules for these games were posted on bulletin boards and eagerly examined every day.

It was a remarkable exhibition of group spirit to see the gymnasium packed to its utmost capacity after school with *Pushers* and *Pullers* from all classes and of all ages, rooting and yelling for their respective teams in a 7th grade basket-ball game that would ordinarily provoke no interest, except among the contestants themselves.

A member of the faculty was appointed as official score-keeper and tabulator. She posted on the bulletin boards the outcome of each game, the points earned therefrom, and the total points won by each side in all events to date.

The competition idea was injected into the class work in every possible way during the entire three-month period. The *Pushers* and *Pullers* sat in separate groups at recitation periods. Competitive tests and drills in accuracy and speed were used in mathematics and opposing scores compared. *Pushers* were pitted against the *Pullers* in every class situation where competition would afford opportunity for one group to demonstrate its superiority over the other.

Probably the best results obtained, relatively speaking, were in assembly period decorum and in mass singing. At the beginning of the period of contest, the entire student body was divided in the auditorium at assembly periods according to the two contesting groups, the *Pushers* being seated on one side and the *Pullers* on the other. Twenty-five points were accorded each week to the group, which, in the judgment of a committee of the faculty, whose personnel

was unknown to the students, observed the better order and decorum during the assembly period each week. The announcement at the beginning of each assembly period of the winner of the twenty-five points at the previous assembly period served to procure almost perfect order from the entire student body on all such occasions.

Special contests were held in the first two grades of the junior high school in penmanship. Three contests in piano music, one debate and a typewriting contest were staged during the last week. Every event was so conducted that no one was proclaimed with a flourish of trumpets, so to speak, as an individual winner. The honors won by the individual were proclaimed as having been won by his group.

When the final day, known as *Rally Day*, came, all contests had been held, except the usual field day athletic events, the contests in mass singing and the Pusher-Puller parade.

The seating arrangement adopted for assembly periods furnished excellent motivation for mass-singing throughout the three-month period. On the morning of the final Rally Day, fully forty-five minutes were consumed in community songs, pep songs, three-part and four-part songs, one group competing against the other. Some were rendered by junior high school students, some by those from the senior high school, and others by the entire school, the Pushers vying with the Pullers to excel each other. It was the most remarkable demonstration of co-operation ever witnessed in our school system. Every girl and every boy (*Mirabile dictu!*), without a single exception, participated and sang with such spirit as to cause visitors and patrons to marvel at the spectacle.

Prior to the final Rally Day, the children of all the elementary grades had divided themselves into sympathetic opposing forces of *Pushers* and *Pullers* for the single purpose of participating with the junior-senior high school in a competitive mammoth parade. On the morning of this day, while the mass singing contests were being held, all the elementary children from the several schools assembled on the high school grounds and formed as vanguards for the *Pushers* and *Pullers* respectively. When the older students took their places in line, two competing parades were thus formed in close sequence.

Each parade was headed with a big truck, highly decorated, and loaded with kindergarten children. Four hundred points constituted the prize to the group which was adjudged to have the better parade. Steering committees had been previously appointed for planning the distinctive features, embodying the Pusher, or Puller idea of the two parades. Consequently many original ideas of the children were expressed in the parade. Such features as a goat harnessed to a small wagon and *pulling* his master, who was a *Puller*; a *Pusher* laboriously *pushing* a wheel-barrow in which another *Pusher*, dressed as a clown, was being pushed; cotton pickers pulling cotton from stalks gathered from the cotton fields. Every conceivable device illustrating the *Pusher* or *Puller* idea added to the humor of the situation. The co-operation of the city officials had been secured and the police force placed at our disposal. The streets were cleared of all cars and other vehicles by the police, and the parade given full right of way. With band playing, flags waving, and banners flaunted to the breeze, on an ideal spring day, the two sections

of the parade moved down the middle of the streets, chosen for the route, with perfect order and precision, without a teacher or supervisory officer in line to control or discipline. The sidewalks were lined with thousands of fathers, mothers, business men and other citizens, who came and stood enraptured, as they watched the happy faces and eager steps of their own children pass by in dress parade extending over a mile and a half in length.

After the parade, the usual track events were held on the athletic field. The distinctive feature of the track events was the provision made for children in large numbers and of homogeneous grouping, by size and by classes, to contest against one another. Consequently athletic events were not limited to the few highly developed athletes of senior high school age, but for every event, regardless of the class represented by the contestants, there was a howling mob of rooters of all ages and from all classes, rooting for their respective sides.

When the last track event had been concluded, there was a rush to the auditorium to learn the decision of the judges in all events of the last day and to ascertain which side were the winners of the holiday previously offered by the school board as the grand prize. A half-holiday was the consolation prize for the losing side. Never before was there such an exhibition of school spirit as was manifested at this time, as the winners of each event were proclaimed and the points secured were announced. When the points won by each side had been totalled, and it was announced that, out of approximately 25,000 points, the *Pushers* had won by only 552 points, pandemonium broke loose.

On the following Friday the *Pushers* had their whole holiday and the *Pullers* their half-holiday. To the credit of the splendid spirit of the losers, it should be said that out of their entire number, constituting half of the student body, only four were absent from school while the victors were reveling in their holiday, and these four were absent for unavoidable reasons.

From our experiment, we concluded that the following advantages were derived:

1. Every student in the school had a part in the contest and received a stimulus.

2. The slow and the mediocre pupils all had a chance to do their bit for their respective sides and had no occasion to labor under the depression of an inferiority complex.

3. The students were stimulated to participate in large numbers in athletics throughout the period of the contest.

4. Class work was greatly improved.

5. All boys were induced to sing.

6. Practically every form of school activity was included in the contest and was greatly stimulated thereby.

7. School spirit was breathed into the entire student body.

8. The teachers were spared the drudgery of coaching star contestants for literary events, thus misdirecting their energy and time.

9. The faculty was given the opportunity to work out and execute co-operatively with each other and with the students a worth-while project.

10. The students learned the civic lesson of subordination of the individual and his glory to the common welfare of the group of which he was a part and whose interests he was obligated to serve.

11. The students secured experience in co-operative effort, in which large numbers participated. Social co-operation was intensified.

12. All the children of all the schools of the city had an opportunity to participate in the parade and to enjoy the field-day events. This is impossible at a regional meet.

13. Every school patron was given a chance to witness his child as an actual participant, thus bringing the school and the community closer to each other.

14. The tax-paying public was impressed with the magnitude and importance of the school system as a civic asset.

State Advisory Committees on Higher Education

Near the close of the last annual meeting the Association authorized the experiment of having, "in a few states," advisory committees on higher institutions. The purpose of this plan and the general nature of the scheme may perhaps best be gathered from the official minutes of the meeting. The idea was presented by President R. M. Hughes, Secretary of the Commission on Institutions of Higher Learning, and was stated as follows:

"I move that the Association authorize the officers of the Commission on Higher Institutions to try the experiment for the next year of creating in a few states an advisory committee on higher institutions.

"The duty of the advisory committee would be—

(a) To collect an annual report blank from each college recognized by the Association or seeking recognition, this blank to be prepared by a committee of the Commission on Higher Institutions, and organized in terms of some one or more specific questions for standardization.

(b) To act as a committee of review of the reports received from the higher institutions within the state; to tabulate the returns and to make advisory recommendations to the Commission on Higher Institutions.

(c) To make recommendations to the officers of the Commission concerning requests for inspection, and to offer suggestions concerning available inspectors. In general it will be the policy of the officers of the Commission to designate inspectors from neighboring states."

The Association and Junior High Schools*

BY IRA SMITH

REGISTRAR, UNIVERSITY OF MICHIGAN

One of the constitutional provisions of the North Central Association of Colleges and Secondary Schools specifies that the object of the Association shall be to establish closer relations between the secondary schools and the institutions of higher education within the North Central States and such other territory as the Association may recognize.

Following out this provision with reference to high school work as related to college admission the Association has considered during recent years the question of a revision of College entrance requirements made necessary by the reorganization of secondary education on account of a departure from the common 8-4 arrangement of grades. In 1918 Professor C. O. Davis presented a comprehensive report to the Association on the Junior High Schools. This report was based upon data secured by a questionnaire which was sent to each North Central Secondary School which was on the accredited list in 1916-1917, and to such new schools as were thought eligible in 1918.

The report concluded as follows: "In general summary, therefore, it may be said that approximately 300 schools in the North Central territory have consciously sought to take steps looking to the modification of the 8-4 plan of or-

ganization in harmony with the Junior High School idea; that possibly 175, or 60%, of these have already incorporated enough of the commonly accepted characteristics of a Junior High School to be entitled to bear that name; that another group of 75 (approximately 25%) have made good beginnings, but have advanced only a short distance on the road to reform; and that the remaining 43, or approximately 15% of the whole number, are deceiving themselves with names,—are mistaking the husk for the kernel—and have need of much instruction. Again, however, as was said at the beginning: All depends on definitions. Perhaps the North Central Association could do no greater service at the present time than to begin, cautiously and gradually, the standardization of the Junior High School."

The Association adopted the following resolution regarding Junior High Schools at the 1918 annual meeting:

"Resolved, That the term Junior High School as used by this association shall be understood to apply only to schools including the ninth grade combined with the eighth grade, or with the eighth and the seventh grades in an organization distinct from the grades above and the grades below." (1918 Proceedings, page 148).

In 1919 the Association adopted the following resolutions:

"Resolved, that next year an attempt be made by this Commission to secure a complete classification of: (a) all

*A summary of the actions of the North Central Association of Colleges and Secondary Schools relating to Junior High Schools and to Admission to College from Senior High Schools.

Junior High Schools operating as independent units, (b) all Six Year High Schools operating as independent units, and (c) all Three year Senior High Schools operating as independent units."

"Resolved, further, that to facilitate this plan, the following tentative definitions of the three types of school be accepted, namely:

(a) A Six Year High School is a school in which the entire work above the sixth grade is unsegregated in buildings and is organized and administered by a single staff of officers and teachers.

(b) A Senior High School is a school in which the 10th, 11th, and 12th grades are segregated in a building (or portion of a building) by themselves, and are taught by a staff distinct from that which teaches in the grades below.

(c) A Junior High School is a school in which the seventh, eighth and ninth grades are segregated in a building (or portion of a building) by themselves, possess an organization of their own that is distinct from the grades above and the grades below, and are taught by a separate corps of teachers. Such schools, to fall within the classification of Junior High Schools, must likewise be characterized by the following:

(1) A program of studies decidedly greater in scope and richer in content than that of the traditional elementary school.

(2) Some pupil choice of studies, elected under supervision.

(3) Departmental teaching.

(4) Promotion by subject.

(5) Provision for testing out individual aptitudes in academic, pre-vocational and vocational work.

(6) Some recognition of the peculiar

needs of the retarded pupil of adolescent age, as well as special consideration of the supernormal pupil.

(7) Some recognition of the plan for supervised study."

In 1920 Mr. J. B. Edmonson gave a report of the work of a committee appointed by the Commission on Secondary Schools on classification of Six year, Senior and Junior High Schools. (1920 Proceedings, Pages 10-A-17-A). The work of this committee was directed toward an attempt to secure a complete classification of:

(a) All Junior High Schools operating as independent units;

(b) All Six Year High Schools operating as independent units; and

(c) All Three year Senior High Schools operating as independent units.

The committee work was carried on by the questionnaire method. The newness of the Junior High School movement was revealed by this report. This fact served to emphasize the need of much caution in the handling of Junior High School problems by the association particularly with reference to the adoption of an approved list, this cautious procedure being necessary because of the grave danger of hindering the Junior High Schools' development by the adoption of an approved list before standards had been carefully studied.

This Committee again made a report at the Annual Meeting in 1921 (1921 Proceedings, Part I, pages 70-75). This report was based upon a study attempting to achieve three aims—

First—To determine the number of schools in the North Central territory which in departing from the common 8-4 arrangement of grades have organized grades 7-8-9, or 8-9-10, or 8-9 as a separate unit.

Second—to determine standards observed by such schools in:

- A. The preparation of Teachers.
- B. The Teaching Load.
- C. The Program of Studies.
- D. Salary Schedule.
- E. Building and Equipment.

Third—To determine the best method for exercising the directive power of the North Central Association in the reorganization of schools departing from the common 8-4 arrangement of grades.

The Committee formulated the following recommendations:

"1. The secondary schools should be a unit in the educational system and should include grades 7 to 12.

2. For purposes of administrative efficiency, these grades may be organized on the basis of the three-three plan, the two-four plan, the four-two plan, or the six-year plan, as local conditions warrant.

3. Under usual conditions a school system with fewer than five hundred pupils in grades 7 to 12 should not attempt to organize on the basis of more than one unit, provided these grades are housed in one building.

4. Under usual conditions a school system with considerably more than five hundred pupils should organize the secondary school into two units.

5. Ultimately the training of all teachers of academic subjects in grades 7 to 12 should be the same as that fixed by the North Central Association for teachers in accredited high schools.

6. In its curricular offerings, a school should present a range of work in seventh and eighth grades which is more extensive than that offered in the traditional school, and provisions should be made for some pupil choice of subjects to be studied.

7. In the administration of the program of studies in grades 7 and 8, provisions should be made for:

- A. At least partial departmentalization of instruction.
- B. Promotion by subject.
- C. Pupil collateral activities supervised by school authorities.

D. Some form of supervised study, either by teachers in the class rooms or by trained, experienced supervisors in larger study halls.

8. In the administration of the School, provision should be made:

A. For recitation periods of not less than thirty-five minutes, exclusive of all time used in the changing of classes or teachers.

B. For a teaching load of not more than thirty periods per week of forty minutes each.

C. For a number of pupils per teacher based on average attendance of not more than thirty."

"The Committee is of the opinion that the Junior High School movement is of too recent origin to warrant the adoption of standards for accrediting. In fact, the committee is of the further opinion that any effort to standardize Junior High Schools at this time would be productive of much harm."

The report ended with the statement that the "aims and purposes of the Junior High School, its curricula, the method and treatment of subject matter, the making of adequate provision for individual differences, the development of pupil collateral activities, are the vital questions that need much study, to the end that the best practices may be discovered and may be more generally adopted."

Also in 1921 the Commission on Unit Courses and Curricula presented a re-

port embodying a plan for a reorganization of the program in the Senior High School suggesting a certain grouping of subjects for graduation from the Senior High School with a further suggestion that colleges base their entrance requirements upon the proposed three years of work in the Senior High School.

In 1922 a report was made by a joint Committee of the three Commissions of the North Central Association, Mr. J. B. Edmonson, chairman, concluding with the following resolution which was unanimously adopted. (1922 Proceedings, Part I, page 55ff).

"Resolved, that the Conference request the three Commissions of the North Central Association to appoint a joint committee to study the question of defining entrance requirements in such a way as to provide for proper recognition of work done in the junior high school, with the request that the report of the joint committee be submitted to a Conference held in connection with the 1923 meeting of the Association."

In 1923 (1923 Proceedings, Part I, Page 57ff.), a report on the Junior high school situation was made by the chairman of the committee, Mr. Frank G. Pickell. This report was divided into three parts, namely: (A) Summary of replies made to a questionnaire by sixty-three individuals; (B) the formal report of the Committee based upon these replies and including some positive recommendations; and (C) A special investigation concerning the extent of the departure from the 8-4 plan of organization among North Central Association Schools.

Under (B) the Committee made the following recommendations:

"1. That the colleges, in order to encourage the reorganization of the

seventh, eighth, and ninth grades upon a junior high school basis be requested to provide an alternative system of entrance requirements to include not more than twelve units of senior high school work, said units to be completed in the tenth, eleventh and twelfth grades.

2. That the following distribution of units for entrance to North Central Colleges and Universities be considered in the restatement of entrance requirements:

A major of 3 units; two minors of 2 units each. (4 units); electives, 5 units; total, 12 units.

(a) English shall be offered either as a major or minor.

(b) At least 9 of the 12 units shall be in academic subjects.

(c) The two minors may be specified for entrance to the various colleges of any university.

3. That the present high school standards of teacher training of the North Central Association be applied to the ninth grade wherever found until such time as standards can be established for the ninth grade in junior high schools.

4. That the Association take steps to recognize three-year senior high schools as standard schools.

5. That a committee be appointed by the Executive Committee of the North Central Association to prepare in keeping with the preceding recommendations the requirements for a list of recognized junior high schools, and to formulate a plan for the inspection of such schools with the view of establishing a recognized list; said committee to consist of two members of the Commission on Unit Courses and Curricula, two members of the Commission on Secondary Schools, two members of the Commission on

Higher Institutions and six public school officials; said committee to report at the North Central meeting in March 1924. It is further recommended that the said committee report on the number of schools in the North Central territory which meet the requirements proposed and that the work be carried to the point where a list of such schools can be submitted to the Association for approval in 1925."

In 1924 two items of considerable significance were mentioned in the report by Mr. Thomas W. Gosling. (1924 Proceedings, Part I, Page 35).

First: That within the year the number of school systems adopting the 6-3-3 plan of organization in the North Central territory had increased from 138 to 311.

Second: That the University of Nebraska had adopted a plan of admission permitting students to enter with twelve units of work accomplished in the 10th, 11th, and 12th years of the secondary school.

This Committee included in the report "Tentative Standards for Junior High Schools" as suggested guides for the Committee to follow in making up a list of schools in North Central territory for presentation to the association in 1925.

Part III of the 1924 proceedings contains a report of the Committee on Standards for reorganization of Secondary school curricula. This report sets forth certain fundamental considerations including

- (1) Determining educational objectives.
- (2) Selection and adaption of material.
- (3) Organization and operation.

Under (3) the Commission makes the assumption that six years shall consti-

tute the period devoted to secondary education and that curricula should be organized into two closely coordinated cycles for the purpose of securing proper adaptations to the needs of individuals and groups.

The Commission reported that it is their belief that a six year high school program can be administered much more satisfactorily if direct preparation for college is confined to the last three years and recommended to the Association that units for entrance to college be reduced to 11 or 12 and that the work constituting these be confined to the last three years of the secondary school.

In 1924 Dean Kent of Northwestern University addressed the Association on "Articulation of Colleges and Secondary Schools with respect to College admission." In this address he stated that the best interests of the individuals whose careers are at stake will be served largely to the degree that the secondary school and college co-operate. He pointed out the pronounced increase of freedom of secondary schools with respect to organizing curricula and that it is eminently proper that this should be so. However, he also pointed out the danger of organizing curricula for pupils who are not going to college and then demanding that the college admit all who complete any of those curricula, such a demand being inconsistent with school practice below college.

He concluded by saying that, "College admission is a concern of the secondary school because that school has an inescapable duty to its graduates to make the college which seeks information as intelligent as may be necessary concerning them during the period of their high school training."

"College admission is a concern of the

college because by it the college determines not merely whom it will admit, but also sets up measures and standards according to which it is obligated to those whom it admits, for their intellectual achievement and socialization during the time that they remain its students."

Also in the 1924 Report of the Proceedings of the Association, (Part II, page 85) Mr. Leonard V. Koos, of the University of Minnesota, in pointing out the aims and functions of the secondary school included under the former (aims):

- (1) Social-Civic responsibilities.
- (2) Recreational or avocational participation.
- (3) Physical efficiency.
- (4) Occupational training.
- (Functions):
- (1) Democratizing secondary education.
- (2) Recognizing individual differences.
- (3) Providing for exploration and guidance.
- (4) Recognizing the nature of the student at adolescence.
- (5) Providing training in the fundamental processes.

In the conclusion of his address he made the following comment: "It is to be deplored that one of the most promising steps in reform American schools have experienced should be thus delayed—for it can not be more than delay. Recognition of the needs of the reorganization in the way of a re-statement of entrance requirements of junior-senior high school systems is certain to come. The question is not whether, but when. It seems only natural that an organization that was sufficiently forward looking when launched to achieve a wide-scale operation of admission to college by cer-

tificate at a time when admission by examination was almost the universal procedure, should shortly take steps toward encouraging thoroughgoing junior high school reorganization by freeing the new unit from such bondage in curricular matters as it is now under to the College."

In 1925 an extensive tabular report was made including 1571 schools in this particular analysis distributed among 19 states. (1925 Proceedings, Part I, Page 46 ff.) This study shows that 190 schools, or 12 per cent, were then definitely organized as three-year senior high schools; 25, or one per cent, were organized as five-year schools; and 105, or 6 per cent, were organized as six-year schools. These facts point again to the desirability of having the colleges and universities rewrite their entrance requirements in terms of some other than the four-year unit.

Again in March, 1926, Superintendent Newlon, in an address before the Association stated that the institution that does not adapt itself constantly to changing conditions will not only lose its usefulness but will soon become an obstacle to progress. The secondary school must therefore constantly modify its practices to meet the changing conditions if it is to fulfill its function as an educational institution. He also called attention to the fact that the New England Association of Colleges and Secondary Schools passed the following resolution in 1925.

"Resolved, that the Junior High Schools is an established fact in the organization of secondary education, and that the chief burden of preparation for college must rest on the Senior High School. That it should be possible for the pupil who has followed a non-college preparatory curriculum in the Junior

High School to meet the college entrance requirements in the Senior High School."

The report of the Junior High School Committee on Foreign Languages in Junior High Schools, presented by Dr. T. W. Gosling at the 1926 Annual meeting of the Association, included the two following recommendations which were adopted:

1. That the Committee on Junior High Schools be continued, with instructions to observe and to report upon other aspects of the Junior High School problem.

2. That the Commission on Secondary Schools request the Association to repeat its urgent invitation to colleges included within the North Central territory to revise their terms of admission in such a manner as to permit students to qualify for entrance on the basis of units of work, eleven or twelve in number, accomplished in the tenth, eleventh and

twelfth grades or the last three grades of the secondary school.

These reports of the progress of the Junior high school movement show clearly that the Junior high school is a definitely established institution and that of necessity modifications must be made by colleges relative to an adjustment of admission requirements in terms of Senior high school work in order to adequately and fairly adjust applications for admission to college submitted by graduates of Senior high schools.

With such a background of investigation by the Association, showing the almost imperative demand for action on the part of colleges and universities in rewriting their entrance requirements in terms of Senior high school work, a committee was appointed at the annual meeting in 1926 to consider the matter of basing admission to college on twelve units completed in the last three years of secondary school.

The March Issue

The March issue of the Quarterly will contain the program for the annual meeting, together with many preliminary outlines of themes that are to be discussed thereat.

Special Studies of the North Central Commission on Higher Education During the Current Year

GEORGE F. ZOOK, SECRETARY

UNIVERSITY OF AKRON, AKRON, OHIO

While the activities of the Commission on Higher Education seem to consist largely in determining Standards for Higher Institutions in this territory and the accrediting of institutions which meet those standards, a distinct, though related type of activity is of such growing importance as to justify special mention. Through special committees appointed for the purpose, studies have been and are now being made, of questions which are of vital interest to this organization and the educational world in general. This type of activity serves to emphasize the importance of the Association as a clearing house—a point which was considered of sufficient importance at the March meeting to justify the appointment of a committee to consider revising the wording of the Constitution, By-laws, and Standards so as to emphasize the fact that the Association is such a clearing house and standardizing agency rather than an accrediting agency.

A number of such studies are being made this year, and the chairman of the committees or the secretary of the Commission will be glad to receive comments, criticisms, information, or suggestions, relative to the subject in hand. In most cases it was possible to secure statements from the committee chairman in time for inclusion in this article. It was suggested that they outline the objectives

of the committee both from the standpoint of securing possible cooperation from individuals who would be beyond the scope of special inquiries, and also as a means of emphasizing to members some of the important matters which will come up at the March meeting.

President Gage has made the following statement for the committee appointed to take up the matter of professionalism in athletics in accredited institutions, and to study the effects of athletics as conducted with a view to determining their effect on accrediting standards of the institution:

Committee on Athletics

H. M. GAGE, Chairman,
Coe College, Cedar Rapids, Iowa.

The Committee on Athletics—Gage, Smith, Nollen,—has had no formal meeting. I think, however, that all are in agreement on several points.

First, it cannot be assumed that this committee has an "objective." That is a military term, or has, at least, a military flavor. The committee is making no "drive." It is not trying to unearth anything. It is not able to say, "We would not be surprised to discover, etc."

The committee does hope to gather facts, opinions, and impressions from

presidents, principals, teachers, and coaches, who are urged to write freely and in complete confidence to the chairman of the committee. It is not the intention of the committee to submit a formal and formidable questionnaire, but rather to seek in an informal way to get facts and ideas from those who know and are interested.

It should be noted that the resolution authorizing the appointment of the committee was specific on two points: first, that it authorized a study of athletics in relation to academic standards, and second, it authorized cooperation with other responsible agencies. The committee is, therefore, cooperating with the Carnegie Foundation. By use of a method now being devised by preliminary studies by the Foundation it has planned to study the relation of athletics to scholarship in several typical North Central institutions.

I am sure that the issue of our work will be satisfactory to the Committee and to the Commission if the material gathered and the study of it suggests a satisfactory athletic standard to be supplied by the Commission in recommending approval of institutions.

The nature of the work in mind requires time, patience, and good nature. Preconceived notions must not influence the Committee and Commission. The final report and standard must rest on a factual basis. The highest hope of the Committee is for such cordial cooperation as will enable a report of very definite progress at the annual meeting in March.

President Hughes has made the following statement for a committee appointed to make a study of the graduate degrees conferred by the colleges accredited by the Association during the

past five years, and to address the Association of American Universities and the American Council on Education, seeking their consideration of some method of preparing a list of institutions which can with propriety confer the master's and doctor's degree:

Committee on Graduate Degrees

R. M. HUGHES, Chairman

Miami University, Oxford, Ohio.

As the officers of the North Central Association have studied the triennial reports and the applications of colleges applying for accrediting it is very evident that many college instructors have worked for the master's degree and some for the doctor's degree in institutions which were not really prepared to give graduate work. It also seems probable that in many cases graduate work has been offered without much thought and certainly without any intention to offer inferior work, but really because those in authority were uninformed on what graduate work stands for today.

With a view to determining just what is being done in this field a committee was appointed at the meeting in 1926 to secure a report on all graduate degrees conferred during the last few years by the colleges accredited by this Association. It is hoped that a report on such a study will clear up this question somewhat.

With the great increase in college students and the resulting large increase in college instructors there have been very large enrollments in many of our graduate schools. In some cases this crowding of the graduate schools has been so great as to raise some question as to the quality of the work done and the value of the degree.

Certainly in some way the young, am-

bitious teacher should be protected as far as possible from spending his time and money in acquiring a graduate degree which will not be regarded favorably by his colleagues in education.

It is expected that a report on this study will be made at the meeting in March 1927.

At the annual meeting of the Commission in 1925, it was "voted to appoint a committee to investigate cost of instruction in upper and lower divisions of the college and the proportion of distribution of cost between students' fees and other sources."

President Wood, the chairman of this committee, has written as follows:

**Committee on Cost of Instruction in
Upper and Lower Divisions, Etc.**

JAMES M. WOOD, Chairman,
Stephens College, Columbia, Missouri.

I am herewith enclosing a copy of the recommendation, as it was presented for the North Central Association (in 1926). When our committee met last year to consider the matter, they found absolutely no data available from which they could draw anything more than a theoretical conclusion. This being the case, they were quite loath to make any recommendation.

The amount of independent income set for junior colleges is merely a guess, whether the amount be \$6,000, \$10,000, or \$50,000. I am quite convinced in my own mind, and the other members of the committee are equally convinced, that the same condition pertains in regard to the senior college. The amount is fixed at \$100,000, \$200,000, or \$500,000 because somebody thinks it necessary to increase the amount of income that an institution

should receive from sources independent of student fees. We have never had a thorough-going investigation to determine the basis upon which endowments of individual institutions or types of institutions should be built.

I have, for several years, been strongly convinced that there is very little correlation between endowments of a college and either its financial stability or the integrity of its educational policy. Without doubt, some attention should be given to such questions as endowment for physical equipment and the mechanics of administration. But, after all, the only real measure of an institutions worth or of its stability, is the quality of work done. At least this is the conviction of myself and of the committee that was appointed last year.

**Report of the Committee
(Wood, Prunty, Kelly)**

PURPOSE

To investigate the cost of instruction in upper and lower divisions of the college and the proportion of distribution of cost between student fees and other sources. To consider whether the standard requiring \$6,000 of income for a Junior College not supported by city or state be provided from endowment is too heavy a requirement.

FINDINGS

When your committee met and attempted to find some sound basis upon which to make its recommendations to you it was amazed to discover almost no available data. Millions of dollars have been given for college endowment by church and other Boards, by individuals and by groups but it seems never to have occurred to any of them to learn the facts about the costs of college instruction with a view to the use of these facts

in making a wise distribution of endowment funds. Realizing that any report made upon the basis of existing fact would be worthless, your committee recommends that the North Central Association appoint a committee to ascertain as nearly as possible the facts pertaining;

a. to the cost of instruction in the liberal arts college, as well as in the upper and lower division courses of these institutions;

b. to the sources of income both actual and potential upon which the liberal arts college may legitimately draw in meeting these expenses;

c. to the relation of endowment income to educational policy, faculty salaries, annual deficits, perpetuity of institution, its financial stability, per capita cost of instruction, and physical equipment of the college.

In February 1925, Dr. Judd, the Chairman of the Commission, appointed a committee "to make a study of the entire question relating to the desirability of requiring professional training for teachers teaching the first and second years' work in colleges and universities." It was later instructed to ascertain the attitude of the members of the Association "regarding the requirement of educational qualifications for college and university teachers." (Proceedings for 1925, Part II p. 64) The committee consists of two members from each of the three Commissions. Dean Smyser, the chairman, has written as follows:

Committee on Professional Training

WILLIAM E. SMYSER, Chairman,
Ohio Wesleyan University,
Delaware, Ohio.

A report of this committee was presented at the March meeting in 1925

which was published in Part II of the Proceedings of that year. This report summarizes the history of the committee and outlines its plan. We found it impossible to present our report at the meeting last March in view of the fact that cooperating institutions were not prompt in making returns on the questionnaire. A body of data has, however, been assembled and is now in the hands of Dean Haggerty of the University of Minnesota who has undertaken to summarize and classify the information secured. As soon as this work has been accomplished, the committee will make a summary of the results and prepare its report. It is our expectation that the report will be ready for presentation next March.

The following statement pertains to the committee which was appointed "to report under what conditions an accredited institution may operate a night branch or a separate branch, apart from its regular day-time college work without jeopardizing its standing."

Committee on Evening Education, Etc.

GEORGE F. ZOOK, Chairman,
University of Akron, Akron, Ohio.

In recent years there has been a tremendous development of evening and extension education in colleges and universities, particularly in the state institutions and in most institutions located in urban centers of population. We have become accustomed to the idea that colleges and universities should serve part-time as well as full-time students both through correspondence study and through extension and evening classes. Indeed, it is not now unusual for an institution to reach as many or more students through its extension and evening

school work as are enrolled in the regular session. This extension of the facilities of higher education to large groups of persons not hitherto reached is undoubtedly one of the outstanding achievements in higher education during the last two decades.

Inasmuch as this development has been so recent and because adequate funds have seldom been available at any institution, there has been a great variety of practice in the conduct of evening and extension work. In some instances the work is carried on almost exclusively by regular members of the faculty. Here, however, the work may be either considered as part of the regular teaching load or the instructor may receive additional compensation for what is regarded as extra class room work. The latter plan is probably found most frequently.

Up to the present time the only notice which the Commission on Higher Institutions has taken of this matter is to provide as follows:

"Enrollment in schools or organizations for part-time students (e. g., night students, Saturday students, special short term summer students, etc.) may be disregarded, if such schools or organizations are wholly self-supporting, i. e., maintained by fees collected or funds derived from other than endowment sources.

"If such schools or organizations are not self-supporting, the enrollment shall likewise be disregarded; but the average

sum drawn from proceeds of endowment funds for the three years preceeding the report to the Association shall be capitalized at five per cent and the amount deducted from the grand total of endowment."

While these provisions are perhaps adequate safeguards for the financial standards, it is questionable whether other standards including teaching load, preparation of the faculty, and teaching hours, are as fully covered. There is therefore room for a full investigation and an adequate discussion of the proper standards for evening and extension education which may be carried on by a higher institution accredited by the North Central Association.

The committee in charge of this report will welcome the suggestions of any persons who may be interested in the problem.

Another question which will be brought up at the March meeting pertains to the re-stating of entrance requirements in terms of the senior high school. As this matter has been before the Association for some time, the report of those working on the problem will be awaited with keen interest.

It is hoped that these studies and others to be undertaken in the future may be of value toward the solving of some of the many problems which still confront the higher institutions and the educational world of today.

The Measurement and Equalization of the Teaching Load in the High School

BY CLIFFORD WOODY AND W. G. BERGMAN*

UNIVERSITY OF MICHIGAN

I

THE TEACHING LOAD

Previous Studies of the Factors Conditioning Teaching Load

The teaching load is conditioned by a large number of different factors. As the problem is viewed from different angles the importance of these various factors receives a shifting emphasis. The problem is so large and complex that an evaluation of its entire range in a single investigation is impossible. As a result of this limitation upon the investigators, we find that the various studies which have been made upon the problem, have, as a rule, consciously and definitely limited themselves to one of the many aspects of teaching load.

Therefore, it must be realized that no summary of the studies already made can represent the entire truth concerning teaching load. There are some elements involved which are of such a nature that it is difficult to devise an adequate and appropriate method of measurement. Nor can it be expected that the evidence gathered from many investigators, working under different conditions and with different methods and definitions of the problem, would be in exact agreement. However, the different results obtained by attacking the problem from the same

viewpoint may be compared. This will be done briefly in the following pages.

The more important studies of teaching load have been made through the use of the following measures:

1. The size of classes taught.
2. The mode of presentation of the class exercise.
3. The number of preparations necessary each day.
4. The number of classes taught each day.
5. The number of pupils for each teacher.
6. The total number of clock-hours spent in all school work.

It is realized that this summary does not include all of the measures which have been used in the investigations already made. Therefore, in addition, attention will be given to several measures which have been less frequently used than the 6 enumerated.

Size of Class. The size of class differs widely in different parts of the country. This difference is marked particularly between rural and urban sections and between elementary and high schools. In 1920 the average size of class in the elementary school throughout the country was 35; and in the high school, 26. In 180 Illinois cities the average size of class, the same year, for the elementary school was 43. Not only does the size of class differ from one section of the country to the other, but from one sub-

*Acknowledgment is made to Dr. C. O. Davis of the University of Michigan for the use of the questionnaires upon which the study is based, and to Earle F. Gazar for making some of the tabulations.

ject to another. Anderson¹ showed that the size of class in Detroit ranged from 16 in art and 15 in music to 25 in English and 30 in physical education. On the basis of his findings, he recommended that for the various subjects different standards of the proper size of class be established. Probably this indicates an indirect recognition of a difference in teaching load in the different subjects.

Several studies have been made of the effect of differences in size of class upon the pupil. Stevenson,² under the direction of the Bureau of Educational Research at the University of Illinois, attempted to determine the effect of variations in the size of the class upon the achievement of the pupils. As the result of tests given to classes of different sizes at the close of a period of carefully controlled instruction, the conclusion was reached that there was little difference between the achievement of the pupils when taught in large and small classes. The same author, presenting a similar but much more extended study at the meeting of the Educational Research Association in February, 1925, reported approximately the same conclusions, although in this investigation he found the pupils in the larger classes tended to do slightly superior work.

Davis,³ in a comprehensive study of the effect of size of class upon the pupils' marks, computed the marks earned by

2,087 pupils in small classes, i. e., classes with fewer than 20 pupils; by 2,656 pupils in medium-sized classes, i. e., classes with from 20 to 29 pupils; and by 1,154 pupils in large classes, i. e., classes with 30 or more pupils. All told he utilized the marks of 5,897 pupils in 271 different classes from the North Central Association schools in 25 different states. The first section of Table I presenting a comparison of the percentages of A's and B's received in classes of different sizes and the percentages received in all classes irrespective of size shows that size of class has no marked tendency to influence the percentage of the higher marks received. Other figures, not reproduced, indicate that size of class has little or no influence on the percentage of low and medium marks received.

Davis corroborated this study with a second in which the pupils in the large, small, and medium sections were matched in intelligence and achievement, and were given identical instruction for nine weeks. A total of 6,130 pupils were represented in this study. The percentage of A's and B's received in the classes of the different sizes are given in the second section of Table I. From the data obtained in the study of the uncontrolled sections, one sees that size of class had little bearing on the marks received by the pupils.

It will be noted that Davis took the marks received as his criterion of effect upon the pupils, while Stevenson con-

¹Homer W. Anderson, "Size of High School Classes." *Detroit Journal of Education*, December, 1920.

²P. R. Stevenson, *Relation of Size of Class to School Efficiency*, Bulletin 10, Bureau of Educational Research, University of Illinois, 1922.

³C. O. Davis, *Proceedings of the Twenty-Eighth Annual Meeting of the North Central Association of Colleges and Secondary Schools*, (1923), pp. 30-41.

Note. The table will be read as follows: In the uncontrolled sections in English, the pupils in the small classes under 20, had 3 per cent less A's and B's than all of English pupils in large, medium, and small classes; the pupils in the classes of medium size, 20-29, had 5 per cent more A's and B's than all the pupils of English, etc.

Table I. Relation of the Percentages of A's and B's Received in Classes of Different Sizes to the Total Percentages of A's and B's Received by All the Pupils

Subjects	Uncontrolled Sections (Two Semesters)			(Comparable Sections (Nine Weeks))		
	Small	Medium	Large	Small	Medium	Large
English	-3	5	-4	0	1	-3
Social Science	5	-3	1	0	-2	3
Latin	-7	2	7	3	-2	-3
Modern Language	-1	6	-10	-9	6	-16
Mathematics	1	-5	4	-3	0	1
Science	7	-2	2	-1	1	-2
Commerce	4	-2	-15	12	-8	16
All Subjects	2	-1	-1	0	0	-2

considered the scores in achievement tests as his measure of the effect. However, the results obtained by means of these two criteria seem to agree.

Another aspect of the effect of the differences in size of class is the effect upon the teacher. But it is difficult to measure objectively the efficiency of the teachers having classes of different sizes. In connection with Davis' second study mentioned in the preceding paragraphs, the teachers after having taught for 9 weeks, 3 classes of equal ability, but one having less than 20 pupils, one having from 20 to 29 pupils, and one having 30 pupils or more, were asked to indicate which size of class they preferred to teach. Seventy-seven and three tenths per cent of the teachers reported a preference for the medium sized class; 51.2 per cent. saying the medium sized class yielded most satisfactory results to the pupils and 76.4 per cent. that this class yielded most satisfactory experiences to the teachers; 64.5 per cent. indicated that the large class achieved least satisfactory marks and 83.4 per cent. reported the large class most fatiguing; 57.3 per cent., however, reported the teaching load would not be appreciably increased by large classes if

the consideration of the outside correction of themes and papers were omitted. Davis suggests that the preference of the teacher for the medium sized class may be influenced by the recommendation of the North Central Association that classes be limited to 25.

Koos,⁴ in a study of the teaching load in the University of Washington, found that preparation for a class of over 30 required more time than preparation for a similar class of less than 30. This is particularly true of the recitation type of class exercise. However, Koos does not make any recommendation for adjustment on this basis since his conclusions are based upon very insufficient data. He further states that he believes the size of class is a factor in the teaching load, the difference is probably due to the difference in the amount of time spent on correction of themes or other written work.

The Mode of Presentation. Koos, in his study on attempting to determine the relative teaching load imposed by different types of teaching activities, found that an hour of lecture work required

⁴L. V. Koos, *The Adjustment of the Teaching Load in a University*, U. S. Bureau of Education, No. 15, 1919.

2.98 hours of preparation; an hour of laboratory work, 1.23 hours; an hour of scheduled conference, 1.18 hours; an hour of field work, 1.17 hours. Undoubtedly the modes of presentation do not differ so much in the secondary school field as they do in the university. Apparently no studies of this factor have been made in either the secondary or elementary field. With the greater recognition of the differences in methods of presentation which do exist at the present time, particularly in the elementary field, the need for a study of this phase of the teacher's load probably will become more pressing.

The Number of Different Preparations. An important factor which affects the teaching load is the number of different preparations which a teacher must make. Davis⁵ in the report of teaching load in the high schools of the North Central Association showed that 8 per cent of the teachers made but a single preparation while 8 per cent made 5 or more preparations. On the average the 1,100 teachers reported making 2.78 preparations per day. According to Davis, a teacher spends about 1 hour per day in preparation for teaching all subjects. This means that each teacher devotes but 20 minutes to each preparation. Therefore, if all other things are equal, that teacher who has but 1 preparation to make will have a load about 40 minutes lighter than the teacher who have 5 or more preparations. Undoubtedly, this is a significant difference although it applies to but 16 per cent of the teachers reporting in this study. Figured on the same basis, 52 per cent would have a load either 20 minutes lighter or heavier

than the average. Koos⁶ in his study of the university teaching load, found that the differences in load between instructors handling different sections throughout and those handling several sections of the same subject are negligible. He found the average number of hours of preparation per clock-hour of repeated recitation is 2.01; for nonrepeated recitations, 1.79; for repeated lecture, 2.80; for nonrepeated lecture work, 2.95; for repeated and nonrepeated mixed lecture and discussion, 2.1 and 2.20, respectively; for repeated and nonrepeated laboratory, 1.24 and 1.2 respectively.

The Number of Classes Taught. The North Central Association has recommended that 5 classes daily be the normal load and has for many years refused to recognize a school in which an academic teacher is required to teach more than 6 class periods. In 1922 but 2 per cent of the North Central Association teachers conducted more than 5 classes a day, and in 1925 the number with this load had decreased to 1.1 per cent. In 1925, 53.6 per cent of the teachers were teaching 5 classes; and 27.5 per cent, 4 classes. Davis,⁷ in the report for the North Central Association in 1922, gave by subjects the number of classes taught by 1,100 teachers. Table II, reproduced from his report, shows that there are certain quite marked differences among the different subjects in the number of classes taught. The lightest load, indicated by the fewest number of classes taught, is in science. Evidently the difficulties of adjusting the number of laboratory periods required operates to reduce the number of classes taught. However, no such explanation

⁵Davis, *op. cit.*, p. 42.

⁶Koos, *op. cit.*, p. 49.

⁷Davis, *op. cit.*, p. 42-47.

accounts for the fact that the number of classes in English is almost equally small.

Table II. The Number of Classes Per Teacher in the Different Subjects

Subjects	Medium Number of Classes
English	4.87
Latin	5.01
Modern Language	5.20
Social Studies	4.96
Mathematics	5.44
Science	4.74
Commercial Work	5.10
Practical Arts	4.92
Fine Arts	5.24
Physical Training	5.00
All Subjects	4.99

The Number of Pupils Per Teacher.

The United States Bureau of Education, in its annual report for 1917-1918, suggested the following definition of teaching load: "The total number of pupils divided by the total number of teachers gives what is known technically as the teaching load." On this basis the teaching load for all types of schools throughout the United States in 1920 was approximately 35 pupils; for the junior high school approximately 32 pupils; and for the senior high school, approximately 25 pupils. The North Central Association has set 25 pupils at its standard and considers an average enrollment in excess of 30 pupils per teacher a violation of the standard.

The number of pupil periods a week has also been used as another measure of the teaching load. In 1920 the average number of pupil periods a day varied in the high schools of the North Central Association from 194 for physical education to 89 for domestic arts. For academic subjects it varied from 111 to 126. In 1925, 88.1 per cent of the teachers in the North Central Association

were teaching fewer than 150 pupils a day, the standard for the Association. Apparently the number of pupils taught per teacher throughout the country and also in the territory of the North Central Association is less than the standard set by the Association.

The Number of Clock-Hours Spent in School Work. The attempt to measure the teaching load from any of the approaches mentioned in the previous sections is indirect. A more direct measure of the teaching load is the amount of time expended in connection with the work. Undoubtedly the difference in amount of time spent in connection with school duties and in the difficulty of the work encountered during that time determines whether a teacher's load is light or heavy. It is argued that differences in the various types of school work cause differences in the amount and onset of fatigue, but most of the experimental work on fatigue indicates that true mental fatigue is comparatively slight and infrequent. Therefore it seems justifiable to take the actual amount of time spent in connection with the teaching tasks as a measure of teaching load.

Koos⁹ and Woody¹⁰ obtained similar results in two studies carried on independently. In both cases the teachers were asked to account for all of their time for a limited period. Koos found that teachers spend about 2 hours a day

⁹Proceedings of the Thirtieth Annual Meeting of the North Central Association of Colleges and Secondary Schools, 1925.

⁹Erwin E. Lewis, *Personnel Problems of the Teaching Staff*, 1925, p. 222.

¹⁰Clifford Woody, "The Out-of-School Hours of 150 Teachers." *Educational Administration and Supervision*, March, 1919.

on other than instructional tasks.¹¹ Woody found that the teachers spent about 2.2 hours a day on school work outside of the school building. Woody concluded that the 2.2 hours outside of school and the 6 hours within the school make a day practically equivalent to the standard day in industry.

In 1923 Davis¹² reported the results of a questionnaire study conducted by the North Central Association in which 1,400 teachers kept accurate account of their professional and personal activities. He found that teachers devoted from 25 to 66 hours each week on regular school work. The typical teacher devoted between 8 and 10 hours a day to school work and in addition nearly 1 hour a day to activities of a "quasi-professional" nature.

By dividing the teachers under consideration in this report into 10 large groups, according to the subjects taught, Davis found striking differences in the time required in the preparation for teaching the various subjects. Sixty-two per cent of the teachers of English spent more than 1 hour outside of school time in the correction of papers, but only 37 per cent of all teachers spent as much time in this activity. Over 60 per cent of the teachers of fine arts spent less than 30 minutes a day in this activity.

Influence of Other Considerations on Teaching Load. Koos¹³, in his study of the teaching load in the University of Washington, found that the time required for teaching increased with the rise in the level on which the instruction

was given. The graduate courses required more time than the courses for upper-classmen, and these, in turn, required more time than the courses for lower classmen.

Lewis¹⁴ has called attention to the personality of the class as one of the factors involved in determining the load. Probably with the increase in the tendency to group pupils in sections differentiated according to mental ability, this factor will assume greater importance. At present, there are, apparently, no data on the problem.

Woody¹⁵ found that women gave more time than men to their professional work outside of school. Koos¹⁶ found that women principals spent more time than men principals on school work. On the other hand, he found that women teachers spent less time on their school work than the men teachers. Lewis¹⁷ says, in what seems to be a fair conclusion from the scanty data which we have on sex differences, that women appear to be slightly more conscientious in their hours of work than men.

Davis¹⁸ has noted that the teachers reporting on the questionnaire study made by the North Central Association spent very little time in civic or social affairs. Only 8 per cent reported spending more than 12 minutes a day on charitable or religious affairs, and but 5 per cent reported that amount of time on civic affairs. Perhaps this is indirect indication that the teaching load is so heavy in other particulars that this activity is precluded.

¹¹This finding is not necessarily at variance with Lewis' statement of one hour per day for preparation since Koos includes other school duties not strictly preparation.

¹²Davis, *op. cit.*, pp. 41-56.

¹³Koos, *op. cit.*

¹⁴Lewis, *op. cit.*, pp. 233-34.

¹⁵Woody, "The Differential in Initial Salaries Paid to Grade and High School Teachers," *School Board Journal*, October, 1919.

¹⁶Lewis, *op. cit.*, p. 222.

¹⁷Lewis, *op. cit.*, p. 223.

¹⁸Davis, *op. cit.*, p. 53.

Differences in Teaching Load in Different Subjects. With the exception of the investigations of Davis and Koos, there has been very little study of the differences in load between different subjects. There have been frequent expressions of opinion concerning this topic, but for the most part, these opinions have been neither proved nor disproved by concrete evidence.

Lindsay¹⁹ found that 2 colleges regularly gave the instructors in English a teaching schedule 2 or 3 hours per week less than those given other members of the faculty, on account of the greater amount of time required for the handling of themes and written work. Weet²⁰ called attention to the considerable differences in the load of teachers in different parts of the system, and recommended that the load be lightened for those having unusually difficult teaching positions. He pointed out the difficulty of solving the problem in the elementary school by reducing the number of classes, although he suggested the use of special teachers for relieving some teachers of part of their work. Woody²¹ reported that the teachers from Grades III to VIII spent approximately the same amount of time in preparation for their school work as the high school teachers, but both the teachers of the high school and of the Grades III to VIII spent more time than the teachers of Grades I and II. However, these differences were so slight that he recommended that they be disregarded.

¹⁹E. E. Lindsay, "Scheduling Practices in State Universities and Colleges," *School and Society*, XIX, pp. 556-58.

²⁰H. S. Weet, "Relation of Difficulty of Position and Quantity of Work to Pay," *Proceedings of National Education Association*, 1921.

²¹Woody, "Differential in Initial Salaries Paid to Grade and High School Teachers," *School Board Journal*, October, 1919.

A report of the superintendent of schools of Topeka, Kansas, for 1915, gives the average number of clock-hours spent by teachers of the various subjects in the high schools of the middle west. Table III shows that the range in the teacher's load was from 22.0 to 25.4 hours per week. The teacher of agriculture had the heaviest load and the teachers of physical training had the lightest.

Table III. Number of Clock-Hours a Week Spent by the Teachers of Various Subjects

Subjects	Clock-Hours
Agriculture	25.4
Household Arts	24.3
Commercial Subjects	24.1
English	23.3
Latin	23.2
Modern Languages	23.2
Shop	23.1
History	23.0
Music	22.9
Drawing	22.6
Science	22.5
Physical Training	22.0

II

PRESENT INVESTIGATION

The remainder of this report deals with an attempt to throw some light on two problems involving the teaching load imposed by the different subjects in high school. The first problem deals with the determination of the exact teaching load imposed by the different subjects; the second problem, with the determination of the effect of different combinations of subjects on the teaching load. These two problems were attacked on the assumption that if significant differences in the teaching loads imposed by different subjects or combinations of subjects were found, recommendations would be made for equalizing the different loads imposed.

The data used in this study were obtained from the questionnaires sent out by Davis in his study of time time expenditure of the teachers in the North Central Association made in 1921. The questionnaire sent out asked that all teachers in the schools of the North Central Association record each evening, for a week of 7 days, the exact amount of out-of-school hours they had devoted to numerous types of listed activities. The listed items included personal, cultural, and professional activities, and the list was comprehensive enough to warrant giving a complete inventory of how the teachers spent their out-of-school hours. Among the professional activities listed were the following: (1) the number of minutes per week devoted to preparation for classroom work, (2) the number of minutes devoted to laboratory or shop work, (3) the number of minutes devoted to the correction of papers or other class work, (4) the number of minutes devoted to consultation with, or advising, pupils.

Since in this study the total amount of time required in connection with the teaching of the different subjects is assumed to be the measure of the teaching load, the total amount of time devoted to the 4 enumerated types of professional activities represents the measure of the teaching load imposed by the different subjects. The study is based upon returns from over 1,400 teachers in 15 different states and should, therefore, warrant reliable conclusions.

In summarizing the data, tabulations of the amount of time required were made for each of the 25 subjects usually taught in the secondary schools. Since many of the teachers were teaching more than a single subject, and since many were engaged in activities

other than teaching, the data provided by the teachers were usually classified into 5 groups: (1) from those teachers who were devoting full time to teaching a single subject; (2) from those teachers who were devoting full time to the teaching of a single subject, but who spent a period in supervision of the study hall; (3) from those teachers who were teaching a principal subject and allied subjects; (4) from those teachers who were dividing their time between a principal subject and a second subject; (5) from those teachers who were dividing their time between a principal subject and 2 other subjects. In all tabulations the data were reduced to the average amount of time required for a single recitation or per period equivalent to the length of a recitation.

Table IV, exhibiting the crude summary of the amount of time per recitation devoted to the teaching of the 25 different subjects, is read as follows: the first quartile, median, and third quartile points of the distribution of the amounts of time per recitation devoted to the teaching of English by the 31 teachers who were teaching only that subject and who were free from supervision of the study hall, are 32, 38, and 46 minutes, respectively. This means that one-fourth of these 31 teachers were devoting 32 or fewer minutes per recitation to the teaching of the subject and three-fourths of them that amount or more; one-half of them, 38 or fewer minutes, and one-half that amount or more; one-fourth of them 46 or more minutes, and three-fourths of them that amount or less. The first quartile, median, and third quartile points for those teachers who were teaching only English, but who devoted some time to the supervision of the study hall are 31, 41, and

Table IV. The Amount of Time Spent in Preparation for Each of the Different Subjects According to the Degrees of Heterogeneity of Teaching. Schedules Expressed in Terms of Minutes Per Recitation

Subjects	Subject Alone				Subject and Study Hall				Subject and Allied Subjects				Subject and One Other				Subject and Two Others			
	n	Q1	M	Q3	n	Q1	M	Q3	n	Q1	M	Q3	n	Q1	M	Q3	n	Q1	M	Q3
LANGUAGE																				
English	31	32	38	46	161	31	41	59	13	28	39	54	18	26	37	57	14	28	35	49
French	5	...	19	...	10	28	37	48	...	...	...	...	19	25	29	42	...	...	...	...
Latin	9	26	38	44	42	22	30	43	...	...	...	...	22	24	33	49	...	...	...	...
Modern Language	19	18	24	32	39	25	37	49	...	...	...	...	...	...	...	...	...	...	...	...
Public Speaking	5	23	28	49	9	29	32	79	...	...	...	...	...	...	...	...	...	...	...	...
Spanish	5	21	24	32	10	38	52	62	...	...	...	...	9	16	24	38	...	...	...	...
EXACT SCIENCE																				
Algebra	6	16	20	29	7	7	18	47	26	29	34	44	7	17	28	62	4	28	30	42
Arithmetic	3	...	32	...	4	...	30	...	...	...	...	...	2	...	48	...	...	...	...	...
Biology	10	63	65	88	12	25	45	87	...	...	...	...	...	...	...	...	...	...	...	...
CHEMISTRY	5	...	22	...	4	...	48	...	...	...	...	...	...	...	...	...	...	...	...	...
Geometry	2	...	10	...	...	...	...	...	26	18	30	37	6	12	31	51	...	...	...	...
Mathematics	41	20	30	37	86	19	29	42	...	...	...	...	28	18	33	50	6	29	42	48
Physics	5	...	36	...	9	31	38	49	...	...	...	...	...	...	...	...	...	...	...	...
Science	28	35	45	60	45	28	40	57	...	...	...	...	11	34	44	61	...	...	...	...
SOCIAL SCIENCE																				
History	25	26	32	60	62	24	35	49	...	...	...	...	35	30	39	52	8	25	38	50
Social Science	38	26	37	61	111	25	36	47	...	...	...	...	...	...	...	...	...	...	...	...
HEALTH EDUCATION																				
Physical Education	18	9	15	24	8	2	5	17	...	...	...	...	...	...	...	...	...	...	...	...
VOCATIONAL EDUCATION																				
Agriculture	6	32	38	62	2	...	38	...	...	...	...	...	...	...	...	...	...	...	...	...
Commerce	33	21	30	34	49	25	35	43	...	...	...	...	28	15	30	43	16	20	35	50
Domestic Science	54	18	29	52	28	12	35	57	...	...	...	...	6	18	25	52	...	...	...	...
Manual Arts	38	16	31	50	11	17	28	51	...	...	...	...	...	...	...	...	...	...	...	...
Mechanical Drawing	15	7	16	36	8	10	15	25	...	...	...	...	...	...	...	...	...	...	...	...
FINE ARTS																				
Art	8	12	15	20	11	14	28	49	...	...	...	...	...	...	...	...	...	...	...	...
Fine Arts	6	19	28	32	1	...	48	...	...	...	...	...	...	...	...	...	...	...	...	...
Music	9	10	14	34	6	12	20	24	...	...	...	...	...	...	...	...	...	...	...	...
	424	...	...	...	735	...	...	...	65	...	...	...	191	...	...	...	48	...	...	...

59 minutes, respectively. The remaining portions of the table are read and interpreted after the fashion of the illustration given.

Table IV is presented mainly for the purpose of showing the steps in the development of the problem and consequently warrants little or no discussion. However, it is interesting to note in

passing that in these schools of the North Central Association over half of the teachers (735) are assigned the double task of teaching a single subject and supervising the study hall; that over a third of all teachers (424) are teaching but a single subject; and that slightly more than one-sixth (239) of all teachers are teaching 2 or more distinctly dif-

ferent subjects. It is interesting to point out also that in most of the regular academic subjects over half of the teachers of a particular subject are assigned supervision of the study hall in addition to the teaching of the subject. In French, Spanish, algebra, arithmetic, chemistry, physical education, agriculture, commerce, domestic science, manual arts, mechanical drawing, fine arts, and music the chances of being assigned supervision of the study hall are considerably less than in the regular academic or more general subjects like English, Latin, mathematics, history, or social science. A glance at the other columns of the table shows the great variation in the amount of time per recitation devoted to the teaching of the different subjects. The mere citation of the variation in the number of subjects and in the duties assigned, and the variation in the amount of time required for teaching the different subjects or combinations of subjects suggests the worth of the problem under consideration.

Table IV reveals that many teachers who are teaching a particular subject are devoting a portion of their time to the teaching of other subjects or to the supervision of the study hall. Thus it is necessary in arriving at the load imposed by the teaching of a particular subject, if all teachers who are teaching that subject are to be considered, that some scheme must be instituted for proportioning the time of those teachers who are in charge of the study hall or are teaching more than one subject. Ideally it would be best to determine the relative load imposed by the teaching of the different subjects through basing calculations upon the facts obtained from those teachers who are teaching a single subject and who have no other assigned

duties. Furthermore the preparation and experience of the teachers should be equated. However in this study the number of teachers involved does not warrant such fine controls and it was deemed wise to use all data from all of the teachers' reports even if some crudities and chances for error were involved. Thus it was decided in the final determination of the load imposed in the teaching of a particular subject to consider all teachers and to utilize a system of arbitrary weights for distributing the time of those who were teaching more than one subject. Obviously, all of the time of those who were teaching English, or any other particular subject was attributed to that subject. Since no preparation was required for the period devoted to supervision of the study hall, all of the time of the teacher who was teaching English, or any other particular subject, combined with supervision of the study hall was attributed in full to that subject. Because of the close relationship between the teaching of English, or any other particular subject, and the allied subject, the time in full was attributed to the subject under consideration. For the teachers who were teaching two or more distinctly different subjects, the time was distributed proportionately according to the number to subjects taught. Thus, on the assumption that five is the average number of classes taught in the North Central schools, if a teacher taught four classes of English and one other subject, four-fifths (.8) of her teaching load should be charged to English; if she taught three classes of English and two other classes, three-fifths (.6) of her teaching time should be attributed to English. The time for other subjects was distributed in a similar manner. Thus, by means of these arbitrary

Table V. Sample Computation of Weighted Median and Quartiles, Percentage of the Median for All Subjects, and the Difference Between the Median for the Subject and the Median for All Subjects, Expressed in Terms of the Standard Error of the Median

English	Number of Teachers	Weight	Weighted Number of Teachers	Q1	M	Q3	nQ1	nM	nQ3
Alone	31	1	31	32.3	37.8	45.6	1,001	1,172	1,414
And Study	161	1	161	30.9	41.2	59.1	4,975	6,632	9,515
And Allied Subjects..	13	1	13	27.8	38.8	54.4	361	505	707
And One Subject.....	18	.8	14.4	25.8	36.6	57.2	372	527	825
And Two Subjects....	14	.6	8.4	27.5	35.0	48.7	231	294	409
Total	237		227.8				6,940	9,130	12,870
							Q1	M	Q3
<i>Average: Totals in Columns VIII, IX, and X divided by 227.8.....</i>							30.4	40.1	56.5
<i>Percentage of median for all subjects: Dividing by 31.64, the weighted average for all subjects.....</i>							96.2	126.5	178.3

weights, the weighted number of teachers for each subject was calculated and all the data for a given subject were reduced to a single distribution.

In the arbitrary process of weighting, it is obvious that there is a possibility of error, since a teacher of four classes of one subject and one of another subject may not distribute her time directly in proportion to the number of subjects taught, but may divide her time equally or in some other disproportionate amount between the two subjects. However, it should be said that in another part of this report facts are given to show that the difference between the amounts of time spent in connection with subjects taught is not appreciably increased by heterogeneity of schedule, except when a teacher teaches three different subjects.

Table V presents in detail an illustration of the method by which the data were treated. Column I of the table, showing the facts for English, indicates the number of different subjects taught by those who were teaching English; Column II, the number of teachers teaching the different combinations itemized in

the first column; Column III, the weights, described in the previous sections, for ascertaining the probable load imposed by the teaching of English based on all teachers teaching the subject; Column IV, the weighted number of teachers found by multiplying the numbers in Column II by the corresponding numbers in Column III. Throughout the report the expression "number of teachers" refers to the weighted number. Column V, VI, and VII are respectively the first quartile, median, and third quartile points of the distributions of the number of minutes required in connection with the teaching of the combinations listed in Column I; Columns VIII, IX, and X, the products obtained from multiplying the figures in Column IV by the corresponding quartiles and medians of columns V, VI and VII. In the lower portion of the table some additional steps in the tabulation of the data are given. It seems well to point out that the average weighted quartiles and means of the time consumed were ascertained by dividing the totals for Columns VIII, IX, and X by 227.8, the weighted number of

Table VI. The Median and Quartile Amounts of Time Spent in Preparation in the Various Subjects, Expressed in Minutes Per Recitation and in Percentage of the Median Amount for All Subjects

Subjects	Number of Teachers	Minutes Per Recitation			Percentages of All Subjects		
		Q1	M	Q3	Q1	M	Q3
LANGUAGE							
English	228	30.5	40.1	56.5	96.2	126.5	178.3
French	30	21.3	30.2	40.2	67.1	95.1	126.9
Latin	69	23.3	31.8	44.9	73.5	100.5	141.8
Modern Language	58	23.6	32.8	43.3	74.5	103.2	136.6
Public Speaking	12	14.6	24.6	41.4	46.9	77.5	137.1
Spanish	22	21.7	33.1	50.6	68.5	104.3	159.4
EXACT SCIENCES							
Algebra	47	22.4	28.9	44.6	70.8	91.3	140.6
Arithmetic	4	25.0	30.0	50.0	78.9	94.8	157.8
Biology	22	42.3	54.1	87.2	133.4	170.7	274.6
Chemistry	9	21.3	43.8	58.8	67.2	138.2	185.5
Geometry	31	17.3	30.2	39.1	54.6	95.3	123.3
Mathematics	153	19.3	30.0	41.7	60.8	94.8	131.6
Physics	14	23.8	36.6	48.9	75.1	115.5	154.0
Science	82	31.5	42.0	58.5	98.4	132.2	184.4
SOCIAL SCIENCES							
History	120	26.0	35.6	51.9	82.0	112.3	163.6
Social Science	173	24.9	37.1	51.0	78.6	117.0	160.9
HEALTH EDUCATION							
Physical Education....	26	7.1	11.9	21.6	22.3	37.6	68.1
VOCATIONAL EDUCATION							
Agriculture	8	33.2	37.5	45.0	104.9	118.3	142.0
Commerce	114	22.8	30.7	58.5	72.0	96.8	184.4
Domestic Science	87	17.9	29.3	54.3	55.5	92.5	171.1
Manual Arts	49	15.9	30.0	50.9	50.2	94.9	160.2
Mechanical Drawing..	23	8.0	15.8	32.3	25.2	49.8	101.9
FINE ARTS							
Art	19	12.9	22.3	37.0	40.6	70.2	116.5
Fine Arts	7	19.4	30.8	33.8	61.2	97.2	106.7
Music	15	11.2	16.5	29.8	35.4	52.1	94.0
All Subjects	1,422	21.4	31.6	46.8	67.8	99.9	147.8

English teachers. It should furthermore be pointed out that the weighted quartiles and medians for each particular subject were divided by the weighted quartiles and medians for all subjects in order that the relative load imposed by the teaching of English might be expressed in terms of general load imposed.

Table VI exhibits the average weighted

means and quartile points of the distributions of time spent in connection with the teaching of the different subjects and the percentages these average weighted means and quartiles are of the weighted mean of the time spent in connection with the teaching of all subjects. The table is read as follows: of the 228 full-time teachers of English (the weighted

number) one-fourth of the teachers devoted 30.5 minutes or less per recitation and three-fourths devoted that amount or more in connection with the teaching of the subject; one-half of the teachers devoted 40.1 minutes or less and one-half that amount or more; three-fourths of the teachers devoted 56.5 minutes or less and one-fourth that amount or more. Similarly one-fourth of the teachers spent 96.2 per cent of the average time per recitation for all subjects in connection with each recitation; one-half of the teachers spent 126.5 per cent or more; one fourth, 178.3 per cent or more.

Preparation. It will be noticed that the average time spent in connection with each recitation in the various subjects varies from 54.1 minutes for biology to 11.9 minutes for physical education; that in most of the subjects in which the median for the subject is above the median for all subjects, at least 25 per cent of the teachers spent less than the average amount of time in connection with that subject. This does not hold true in the case of biology or agriculture, but in chemistry, English, history, social science, and other subjects in which the medians for the subject are considerably above the median for all subjects, one-quarter of the teachers spent, in connection with the subject, less than the median amount of time for all subjects. The same variation is found in subjects whose medians are below the median for all subjects. The median for mechanical drawing is one of the lowest, but one-quarter of the teachers spent more than the average amount of time in connection with the subject.

The Significance of the Differences Between Subjects. The differences between loads of teachers in the same subject are very striking. In 10 of the 12

subjects in which the median amount of time is greater than that for all subjects, at least 25 per cent of the teachers spent less time than the median amount of time spent for all subjects. In 11 of the 13 subjects in which the median amount of time is less than that for all subjects, at least 25 per cent of the teachers spent more time than the median for all subjects. When the differences between the loads of various teachers of the same subject are so marked, it is pertinent to question whether the differences in the loads imposed by the different subjects may not be due to chance operating in the selection of the particular teachers who furnished the data on which the medians are based.

There are two methods of determining whether the results obtained may be due to chance: 1, making similar tabulations based upon data from all the teachers in the North Central Association and comparing them with the results obtained from the sampling utilized; 2, determining statistically the probability that the same differences would be found if it were possible to base calculations on data from the entire group. Since the reports from all of the teachers in the North Central Association were not available, the second method was used. By means of this method statisticians are able to predict from the differences, when expressed in terms of the standard error of the median,²² the chance of the differences being real. Upon the basis of the generally accepted facts of prediction the following generalizations concerning these data may be made:

1. If the difference between the median for the subject and the median for all subjects is more than three times the standard error of the median for that subject, the chances are 630 or more to

one that the difference would lie in the same direction if the study were repeated. Differences of this size are called "certain differences."

2. If the difference between the median for the subject and the median for all subjects is more than two times the standard error of the median for that subject, the chances are 43 or more to one that the difference would be in the same direction if the study were repeated. Differences of this size are called "probable differences."

3. If the difference between the median for the subject and the median for all subjects is more than the standard error of the median for that subject, the chances are five to one that the difference would be in the same direction if the study were to be repeated with a similar group. Differences of this size are called "possible differences."

4. If the differences obtained are not larger than this, it is considered that there are "probably no differences."

In Table VII the 25 subjects studied are listed according to the degree of certainty of the differences found between

²²The standard error of the median was computed from the quartile which, in turn, was obtained from Table IV. Q , (or the quartile deviation) equals $\frac{Q3-Q1}{2}$, where $Q3$ is the

third quartile and $Q1$ is the first quartile. The quartile deviation is, by definition, the probable error obtained from that distribution. Therefore it will be used as the P. E. of the distribution. Consequently the formula

$$\sigma \text{ median} = \frac{1.2533 \sigma \text{ distribution}}{\sqrt{n}}$$

may be written as

$$\sigma \text{ median} = \frac{1.8581 Q}{\sqrt{n}}$$

$$\left\{ \begin{array}{l} \sigma \text{ median} = \frac{1.2553 \text{ P. E. dis.}}{\sqrt{n}} = \\ \frac{.6475}{\sqrt{n}} = \\ 1.8581 \frac{\text{P. E. dis.}}{\sqrt{n}} = 1.8581 \frac{Q}{\sqrt{n}} \end{array} \right\}$$

their medians and the median for all subjects, as computed by the use of the weights described above²³. There are two subjects, English and science, which "certainly" require more time than the average subject. We may say that the subjects in the next group, biology and social science, "probably" require more time than the average subject. The third group "possibly" requires more time. In the next group, which contains 14 of the subjects, it is "not probable" that the differences obtained would be in the same direction more than half the time if the study were repeated. The fifth group, containing art alone, "possibly" requires less time than the aver-

²³The validity of weighting teachers who spent less than their full time in teaching a single subject as fractional parts of teachers may be questioned. However tabulations based upon the time expenditures of only those teachers who were devoting full time to the teaching of a single subject, or to a single subject and to the supervision of the study hall, reveal approximately the same condition. In eight subjects there were 20 or more teachers teaching one subject and supervising the study hall. The data from these two groups furnish two series of comparisons of the differences obtained on the basis of the weighted number of teachers with the differences obtained on the basis of the actual number teaching the subject alone or in conjunction with study hall. The rankings of the different subjects according to the certainty of their differences in time expenditure were virtually the same whether based upon the weighted number of teachers, upon the number of teachers teaching a single subject, or upon the number of teachers having study hall supervision in addition to a single subject. Consequently basing the computations upon the weighted number of teachers seems justifiable, since it increases the number of teachers on whom the conclusions are based.

Since the variations were slight in the eight subjects where it was possible to check the differences between the computations based upon the weighted number of teachers and the actual number teaching the subject alone, or in connection with study hall supervision, it seems safe to assume, for the subjects which are represented by a small number of teachers, that the weighted number of teachers gives substantially the same results as would be obtained from a group who were teaching the same subject alone.

Table VII. Differences Between the Median Amount of Time Spent in Connection with the Various Subjects and the Median Amount of Time for all Subjects in Terms of the Standard Error of the Median

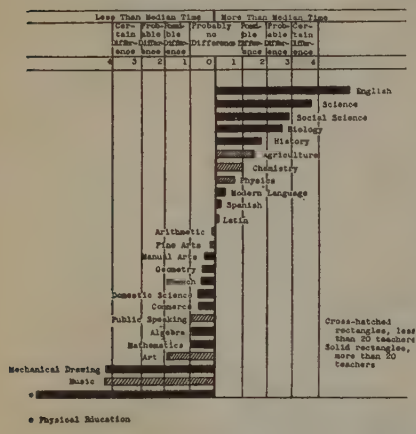
Differences	Number of Teachers	Percentage Median for All Subjects	Standard Error of Median	Difference in Terms of Standard Error Median
CERTAIN DIFFERENCES				
(Above the median)				
English	228	126.5	5.05	5.25
Science	82	132.2	8.82	3.75
PROBABLE DIFFERENCES				
(Above the median)				
Social Science	173	117.0	5.81	2.92
Biology	22	170.7	27.90	2.53
POSSIBLE DIFFERENCES				
(Above the median)				
History	120	112.3	6.94	1.77
Agriculture	8	118.3	12.21	1.50
Chemistry	9	138.2	36.67	1.04
PROBABLY NO DIFFERENCES				
Physics	14	115.5	19.58	.79
Modern Language	58	103.2	7.56	.42
Spanish	22	104.3	17.91	.24
Latin	69	100.5	7.66	.07
Arithmetic	4	94.8	36.63	—14
Fine Arts	7	97.2	15.93	—18
Manual Arts	49	94.9	14.62	—35
Geometry	31	95.3	11.60	—41
French	30	95.1	10.11	—48
Domestic Science	87	92.5	11.54	—65
Commerce	114	96.8	4.87	—65
Public Speaking	12	77.5	25.08	—90
Algebra	48	91.3	9.41	—92
Mathematics	153	94.8	5.32	—98
POSSIBLE DIFFERENCES				
(Below the median)				
Art	19	70.2	16.22	—184
CERTAIN DIFFERENCES				
(Below the median)				
Mechanical Drawing	23	49.8	14.88	—3.37
Music	15	52.1	14.10	—3.40
Physical Education	26	37.6	8.38	—7.45

drawing, music, and physical education; "certainly" requires less time than the average subject. Figure I shows these results in graphic form.

It should be pointed out that in the formula for the standard error of the median the number of cases under consideration is a most vital factor in the

determination of the size of error and its resulting significance. With some subjects, e. g., arithmetic, fine arts, public speaking, etc., the number of cases is too small to warrant accepting the conclusions as final. If this study were repeated with a similar group of teachers, the chances are approximately equal that

Figure I. The Significance of the Differences in the Amount of Time Required in Preparation of the Various Subjects Expressed in Terms of the Standard Error of the Median.



the amount of time required would be greater or less than the given medians. With such subjects as biology, physics, social sciences, chemistry, public speaking, and art, in which the time requirements deviate widely from the median requirements of time, the number of teachers reporting is so small that the resulting ratios of the different standard errors to the median indicate the differences are less than significant. If similar differences were found on the basis of a large number of cases instead of the few cases used in the present study, the differences would be significant. Thus the conclusion drawn concerning the time requirement for these particular subjects must be considered as tentative until additional investigations have been completed. In the subjects of English, science, mechanical drawing, and physical education, the number of cases is sufficiently large to warrant the conclusion drawn. The chances are that,

if the study were repeated and based upon an infinite number of cases, the median time requirement would not deviate much from the median obtained in this study.

Adjustment of Teaching Load. Since significant differences exist in the amounts of time required in connection with the teaching of the different subjects, the question of making suitable adjustment in teaching loads imposed by the different subjects naturally arises. Present practices may make some attempts to adjust the loads imposed, but no definite method of determining the load has been developed. The teachers of physical education, who obviously have a light load, may have to coach athletic teams after school, but on the other hand the teachers of English, who obviously have a heavy load, are often burdened with excessive extra-curricular activities.

On the basis of the facts previously cited, it seems possible to suggest a method for equalizing, in a more or less scientific manner, the loads imposed by the different subjects. It is possible that this method of equalizing the loads imposed will not be applicable in all cases; nevertheless the method seems to be worthy of presentation.

This method is based upon the assumption that all class periods for the subjects given in Table VIII are 40 minute periods, since this was the length of period in 78 per cent of the schools in the North Central Association in 1924. Therefore 200 minutes a day represents the length of time spent in recitation by the teacher who meets five classes a day. By multiplying the median number of minutes of non recitation time devoted to teaching the different subjects under consideration by five, the total amount

of non recitation time per day spent by individual teachers was obtained. Since the median amount of time per recitation devoted to the teaching of all subjects is 31.67 minutes, and the amount of time for each recitation is assumed to be 40 minutes, the median amount of non-recitation and recitation time for a teacher meeting five classes per day is 358 minutes. The amounts of time devoted to teaching, e. g., non-recitation and recitation time, by the teachers in each of the seven subjects in which there were the most significant differences, are expressed as percentages of 358 minutes, the median time for all subjects. Column five of Table VIII, showing that these percentages vary from 73 to 131, indicates much inequality in the loads imposed. To equate these loads in terms of the average load it is suggested that the following formula be used:

$$N \text{ equals } \frac{\text{Standard Load}}{P}$$

where N represents the number of classes which should be carried in order to equalize the load; Standard Load represents the average number of classes carried by the entire teaching staff; and P represents the percentage of the average time required by the particular subject. Column 6 of Table VIII reveals that the number of classes which should be assigned to the teachers of physical education in order to give them a standard load is 6.9 classes per day; for the teachers of biology, 3.8 classes per day. Similar figures are given for other subjects. Column 7, indicating the average number of classes actually taught in 1922 by the teachers in high schools of the North Central Association, portrays the extent to which equitable adjustments of the teaching load imposed

by the different subjects are being made. On the whole, the tendency to make adjustment is in the right direction, but the actual adjustments manifested thus far are not commensurate with the differences in the load, as disclosed by this study.

Differences in Load Due to Heterogeneity of Schedule. Thus far the discussion of this report has centered around the differences in the teaching of particular subjects, as if all teachers were teaching a single subject. However, as pointed out in this study, many teachers are unable to confine their energies exclusively to the teaching of a single subject. If one teaches but a single subject she is an exception. She may have to devote one period to supervision of the study hall in addition to the teaching of her classes in a single subject, or she may have to teach two or even three subjects. With some subjects, e. g., English, the chances of teaching only that subject are much greater than with other subjects, e. g., physics. Naturally the question arises concerning the influence on the teaching load of a combination of teaching one subject and supervision of the study hall or of teaching two or three subjects.

In order to determine the influence of the different combinations of duties or subjects, comparisons were made of the relative amounts of time required. In making these comparisons the teachers for each subject were divided into four groups: those teaching but one subject, those teaching one subject and having supervision of the study hall, those teaching two subjects, and those teaching three subjects. Obviously for each subject the number in the group teaching three subjects was small. This number, being the smallest in the four groups,

Table VIII. The Number of Classes Which Should Be Assigned in Different Subjects to Give an Equitable Distribution of Load, Other Things Being Equal

Subjects	Number Minutes of Recitation	Number Minutes of Preparation	Total Time	Percent of Median Time	Normal Number of Classes	Actual Number of Classes
English	200	200	400	112	4.5	4.87
Science	200	210	410	114	4.4	4.74
Biology	200	270	470	131	3.8	4.74
Social Science	200	185	385	107	4.7	4.96
Mechanical Drawing.....	200	79	279	78	6.4	4.92
Music	200	83	283	79	6.3	5.24
Physical Education	200	60	260	73	6.9	5.01

was taken as the weight to be used in arriving at comparable figures. Thus the medians and quartiles, since they represented most accurately the amounts of time expended for each of the different groups, were multiplied by that number. To illustrate, there were 14 teachers who were teaching English primarily who were teaching two other subjects. Thus the medians and quartiles for each of the other enumerated groups teaching English were multiplied by 14 in order that proper weight be given to the subject of English in the computations involving all subjects. Other subjects than English were treated in a similar manner and then the weighted averages of these quartiles and medians were ascertained for the four enumerated groups of teachers.

Since there were only 39 teachers who were teaching three subjects, it seemed wise to supplement the facts obtained from this group of teachers by making similar tabulations for a larger group using the number of teachers teaching two subjects as the weights to be used in the calculations of the grand totals. In this set of calculations the data from 114 teachers were involved. Similarly a new set of calculations was made, using the number of teachers teaching one subject and having supervision of the study hall

as a basis. In this set of calculations the data from 339 teachers were involved.

In all three sets of tabulations heterogeneity of schedule is the only variable concerned. In the first set of tabulation the figures present a comparison of the loads imposed on the four groups of teachers; the second set, on the three groups; the third set, on the two groups. It should be evident that the reliability of the finding becomes more and more significant as the number of teachers involved increases.

Table IX, exhibiting a summary of the three sets of tabulations, shows that with but a single exception the median amount of time spent in connection with the subject is greater for the teacher who has the greater amount of heterogeneity in her schedule, if the principal subject alone, the principal subject and study hall duty, the principal subject and one other, and the principal subject and two others be considered the successive steps in the heterogeneity of the schedule. The quartiles in the successive steps of increasing heterogeneity show that the markedly consistent rise of the medians with the increasing heterogeneity is not duplicated. In six of the 12 possible comparisons the quartiles are smaller. Since this evidence does not corroborate the tendencies discovered in the comparison

Table IX. The Amount of Time Spent in Connection with the Same Subject for Different Degrees of Heterogeneity of Teaching Schedule Expressed in Medians, Quartiles, and Percentages of the Median Time for All Subjects

Subject Combination	Number of Teachers	Minutes Spent			Percentage of Median for All Subjects		
		Q1	M	Q3	Q1	M	Q3
Subject Alone	39	25.1	30.9	43.6	79.4	97.5	137.6
Subject—Study Hall	39	25.2	31.4	51.4	79.4	99.3	161.8
Subject—One Other	39	21.4	31.3	47.6	67.5	99.0	150.2
Subject—Two Others	39	30.5	38.9	48.9	96.2	122.6	154.1
Subject Alone	114	23.9	31.6	46.2	75.5	99.5	145.3
Subject—Study Hall	114	23.0	32.0	47.8	72.5	101.0	150.2
Subject—One Other	114	22.9	32.9	51.2	72.2	103.8	161.3
Subject Alone	339	22.6	30.5	46.9	71.3	96.2	147.7
Subject—Study Hall	339	21.6	31.6	47.2	68.1	99.7	148.9

son of the medians, it becomes advisable to ascertain statistically the certainty of the differences found.

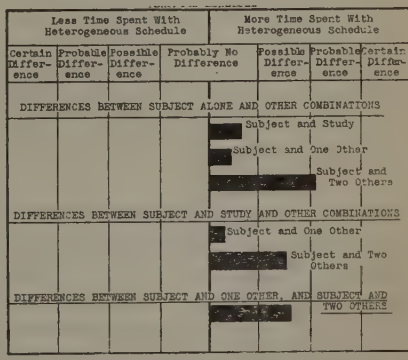
The measure of the certainty of the differences in the heterogeneity of schedule used is the ratio of the difference to the standard error of the difference of the medians.²⁴ This is to be interpreted in a manner similar to the standard error of the median previously used, i. e., differences more than three times the standard error of the difference of the medians are considered *certain*; more than two times the standard error, *probable*; more than the standard error, *possible*; and less than the standard error, *not probable*.

Table X gives the differences between the medians for the different degrees of heterogeneity of teaching load, expressed in terms of the standard error of the difference of the medians. Figure II exhibits graphically the significance of these differences. It will be noticed

²⁴The standard error of the two medians is found in the manner explained in the footnote on the bottom of page —. The standard error of the difference of the medians is found by the formula:

$$\text{S. D. Difference of Medians} = \sqrt{\text{S. D.}^2 \text{ median}_1 + \text{S. D.}^2 \text{ median}_2}$$

Figure II. The Significance of the Differences in the Median Time Spent in Connection With Varying Degrees of Heterogeneity of Teaching Schedule.



that the differences between teaching the principal subject and two others, and the other three degrees of heterogeneity are either *probable* or *possible*. All of the other differences are within the limits of *probably no difference*. Expressed in other terms, the chances are 278 to 100 that teaching a principal subject and doing study hall duty requires more time than teaching one subject; 200 to 100 that teaching a principal subject and one

Table X. Differences in the Amount of Time Spent in Preparation for Various Degrees of Heterogeneity of the Teaching Schedule in Terms of the Standard Error of the Difference of the Medians

	SUBJECT AND STUDY				SUBJECT AND ONE OTHER				SUBJECT AND TWO OTHER			
	NO. OF	D.			NO. OF	D.			NO. OF	D.		
	CASES	DIFF.	S.D.D.	S.D.D.	CASES	DIFF.	S.D.D.	S.D.D.	CASES	DIFF.	S.D.D.	S.D.D.
Subject Alone	339	1.13	1.78	.63	114	1.35	3.14	.43	39	7.98	3.86	2.0
Subject and Study .....	.....	.....	.....	.....	114	.89	3.28	.27	39	7.46	4.77	1.5
Subject and One Other.. .....	.....	.....	.....	.....	.....	.....	.....	.....	39	7.54	4.75	1.5

other subject involves more time than teaching a single subject; 5100 to 100 that teaching a principal subject and two others requires more time than teaching a single subject. The chances are 154 to 100 that teaching one principal subject and one other requires more time than teaching that subject and doing study hall duty and 1584 to 100 that teaching one principal subject and two others requires more time than teaching that subject and doing hall duty. The chances are 1688 to 100 that teaching one principal subject and two others requires more time for preparation than teaching a principal subject and one other subject.

Summary

1. There is a great variation in the amount of time utilized by different teachers in connection with the teaching of a subject. In most subjects one quarter of the teachers spend less than half the time spent by another quarter of the teachers of the same subject.

2. The amount of time spent by the average teacher of the different subjects varies greatly. The average teacher in one subject may spend over four times as much time in connection with each recitation as does the average teacher in another subject.

3. In order to equalize the total load, including both the time spent in preparation and the recitation time, allowance

should be made for the differences between various subjects. It is suggested that the degree of allowance made for the differences in the amount of time required be determined from the formula

$$N = \frac{\text{Standard Load}}{P}$$

where N equals the number of classes which should be carried to equalize the load, Standard Load equals the average number of classes carried by the entire teaching staff, and P is the percentage of the median time for all subjects which is required by the particular subject. If allowance were made according to this formula in the schools from which the data of the study were obtained teachers in some subjects would teach one class less and teachers in other subjects would teach one class more than the average number of classes for all teachers.

4. The amount of time required by a teacher teaching three distinct subjects is considerably more than that required by the teacher having one or two subjects. However there is no significant difference in the amounts of time spent by the teachers of one subject and the amounts spent by teachers of two subjects and no significant difference in the amounts of time spent by these two groups of teachers and the amounts spent by those teaching one subject and having supervision of the study hall.

Character Education in the Junior High School

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"Character is the ultimate aim of education." I think few would disagree with the above statement, no matter how we define "character." We may consider it as the sum total of the social reactions of the individual, or, in other words, "The sum of those personal qualities which give an individual his moral standing in the eyes of his fellows and of his God." I have, however, used the term character education advisedly for it is not subject to the misunderstanding under which the synonymous term "moral education" labors. "Character education" implies the unfolding of the child's better self by the process of growth and under the guidance and encouragement of the teacher. Its purpose is the growth of the child out of its weaknesses into strength, depth, and breadth of noble character. This article is chiefly concerned with the cultivation of the best moral and personal qualities in the junior high school. To say the least the task is difficult. Other aims in education are more tangible and more easily attained; moral character is intricate and subtle in its very nature. The writer has, therefore, avoided dogmatic rules and has rather endeavored to speak only in the light of experience.

I believe few educators boast today that the schools of America are turning out pupils with the highest moral character. Many are doing their utmost, but many more have lost sight of the aim of education in dealing with the *methods* of instruction. The earlier ideal was

cultivation of the mind; we have now returned to the old Greek ideal of a perfect body as well. Shall we not soon return to that still older type of training among the earliest Greeks—the training in moral character? When they neglected such training their country became corrupt. Does not their example have a meaning for us today?

The training of character has always been a problem of vital concern to our more serious educators. Here and there individual teachers or even school systems have at various times introduced systematic plans for its attainment, and many of them are flourishing today. In recent years the movement for definite recognition of such systems in the schools has had a constant and wide increase. Since the flurry of writing during the first decade of this present century, the exponents of the movement have settled to a gradual extension of their work. Here and there we hear echoes of it from state and national conferences, from national and international organizations. In the Detroit meeting of the Department of Superintendence of the National Education Association some few years ago (1916) a business man offered an award of \$5,000 for the best children's code of morals. This "National \$5,000 Morality Codes Competition" brought to the fore the aims of character education. (It was won by Professor Wm. J. Hutchins of Ohio). Later the same business man offered a similar award of \$20,000 for the best

methods of character education in public schools, thus emphasizing the practical means of attaining the desired end. The International Moral Education Congress by its surveys and research work has given valuable aid and the National Educational Association of our own country is the creditor of all those interested in such work. These few things alone show how widespread is the present interest in the subject of this article.

Each day we find increasing need for character education. Whether or not we believe that the youth of today is worse than the youth of yesterday, we must face the fact that by far the greater number of criminals of today are adolescents. And our schools have refused to accept all of the blame implied in the question "why?" Back in 1916, Sara H. Fahey showed some of the evils which the schools had to face and which are equally true today. In a short article entitled "Moral Education: What the School Can Do," she¹ enumerates several valuable points which I will briefly summarize:

1. Overcrowding—the children are herded into the schoolroom in masses.
2. Overcrowded curriculum.
3. Inability of many parents to deal with moral problems.
4. Soft pedagogy—the modern idea of both pupils and teachers that unless there is feverish outward activity the school life must be dull.
5. A tendency to shuffle responsibility from the child to the adult.
6. The difference between "paper efficiency" and real efficiency on the part of the teacher.
7. The economic situation.

Cries come from the judges of juvenile

courts, from the towns where schools are closing on account of cost, "What has the school to show for its work?" This is not a terrorist article—I am merely giving facts easily verified. Why are high schools being closed in Ohio and in some other states? Why does Judge John McIntyre of the Court of General Sessions of New York say² "My experience in this court leads me to believe that most of the serious crime of today in our country is being carried on by young people. Certainly it is true of New York County! Our vicious criminals here—our forgers, burglars, hold-up men, murderers—are young people between the ages of sixteen and twenty-three?" And he does not exempt the "educated youth" either. Listen: "Among these all classes of society are represented. Some of our shoplifters and crooks' assistants are pretty, stunning young women—well-educated girls with cultivated speech, from good residential districts. Some of our young men criminals are college graduates."

With such conditions facing modern society, the state has the right to demand that each of its institutions bend every energy to solving its problems. Of the school more than any other it has the right to demand good training in citizenship, the building of such character as will be able to stand firm against the inducements to evil that face every youth.

Enough perhaps has been said to show how vital the question under discussion is to the modern teacher and school administrator. The design of this article is merely to show what part the junior high school must play in the solution. For further information those interested

¹N. E. A. Addresses and Proceedings, 1916, p. 638-644.

²From the Good Housekeeping Magazine, Aug. 1926, p. 37, "The Stampede of Youth" by Vera T. Connolly.

in statistics may consult two recent books upon moral tests: "An Experimental Method for the Discovery and Development of Tests of Character" by Theodore F. Lentz, published by Teachers College, Columbia University, and "A Study of the Moral Development of Children" by Marie Cecelia-McGrath, printed in *The Psychological Monographs* Vol. XXXII, No. 2.

What Character Education Is

From the psychological point of view character education consists of the training of the instincts. It is universally conceded that instincts belong largely to the class of hereditary native impulses and are in and by themselves without fault. Whether we turn to the criminal judge on the bench, the religious believer, or the "dry-as dust" psychologist, we meet the acceptance of the above fact. The criminal judge answers that crime is due to instinct which has been left untrammelled in its development; the religious leader attributes sin to the same cause; and the psychologist points gravely to the fact that perversion of instinct causes warping of both body and soul. But we do not need these leaders of thought to tell us that instinct exists in each of us. We are ourselves vaguely or clearly conscious of its presence. When the flush of anger comes, and we respond with tigerish quickness, there is no question in our minds that something within us causes the reaction. We may show no outward sign of emotional disturbance but our nerves register the impulse. The question in character education is "How may these native instincts be directed into the proper channels?"

The so-called acquired instincts are mainly habits which will be discussed later; here we are primarily concerned

with inherited instincts, native to the race. Fear with its opposite of courage, envy, jealousy, constructiveness, desire to destroy, imitation, all these and many more comprise the sum of native reactions which the school must direct.

For our purposes we may classify instincts as potentialities, repressants and depressants, in accordance with the way in which they must be treated. The first class are those which lie sometimes slumbering; they need awakening, gentle encouragement, or stimulation, as well as wise direction. Sometimes we hear one girl say of another "Oh, she's no fun. She never smiles." Perhaps the other has never learned to smile—her play instinct has been thwarted. Here the wise teacher can lead by gradual steps to a real interest in physical activity. Smiles follow. On the other hand, joy may never have been present in a child's life. The need is for stimulation of an instinct which lies almost dormant. At almost any period in an individual's life certain instincts are in prominence, others in the background. Too often the same uneven balance continues through life. Only the well-rounded man and woman possess instincts which have been by long practice reduced to controlled force. For the potentialities, then, those which will better the character of the individual and of the race, I recommend stimulation.

Repressants are those instincts which have developed but which show a definite tendency toward unsocial, unethical conduct. It is not the case of a thwarted instinct, with which we must in this case deal, but that of slightly overgrown impulses toward evil. Repression, or at least modification, is necessary. Usually the law of association comes into full play at this stage. The idea of pleasure

associating itself with the good and of displeasure with the bad serves in itself to guide an individual almost unconsciously into the right paths. Too often punishment alone is the teacher's weapon against repressants. In some instances it can much better be reached by setting up different standards, desires or ideals which will conflict with the undesirable instinct and thus lead the pupil to firmer ground. In this way it may merely mean the directing of activity into another channel. For example, the boy who seems possessed by a desire to construct and expends his energy in drawing "joke pictures" on the blackboard and defacing furniture by carving, etc., may be so interested in manual training that his energy may find a harmless, yet adequate, and sometimes positively useful outlet. At other times an undesirable tendency may become harmless through constant and consistent neglect.

The depressant instinct is the repressant carried a step further. We usually say "Well, he's just naturally bad. He has always been vicious." In nine cases out of ten the statement is untrue. The child has been allowed to "run wild"; the adolescent uses his addition of freedom unwisely; and the adult becomes a menace to society and a reproach to himself. The same remedies suggested for the second class of instincts are of paramount importance here. The individual must be approached on his own ground. Sometimes only fear of punishment seems to have much weight. Under the state of repression roused by that fear, new suggestions may be made. Suppose that a certain child is convicted of deliberate cruelty. For the safety of others he must be prohibited from such acts. Fear of punishment may act as a deterrent but that will only operate so long as

he thinks he may be caught. Something must be offered to so engage his interest that his former cruelty will fall into disuse and gradually pass away. Here is another instance: John has been found destroying school gardens apparently without any other purpose than that of wanton destruction. The teacher suggests that John enroll in the class of agriculture and be assigned his own plot of ground. Soon his energies are absorbed by the work involved, and he really forgets the former fun of destroying. At the same time he learns the value of labor, and the respect for property that he formerly lacked. Such examples can readily be multiplied in the mind of any conscientious teacher.

Aside from instincts which may be played one against another, character education is also concerned with ideals as the stuff of which its instruments are made. To ideals then we must now turn our attention.

The psychologist believes in instinct-guidance, but the ethical teacher believes in the inculcation of ideals; to him moral life is the achievement of the individual through following an ideal. We recognize the fact that the human child is an unmoral rather than an immoral individual in his acts. Tracy declares that he is even less controlled than a young animal in his behavior and yet the child is capable of moral ideals, motives and conduct. With the adolescent these previously dormant attributes spring into life.

While we are considering ideals, I should especially like to distinguish between teaching moral ideals in the school and teaching religion as such. I can emphatically say that I do not believe in giving denominational dogma, but I do believe that the true Christian teacher (not merely the professed Christian) is

the best teacher of morals that we have. I am not interested now in defending a course in comparative religion but only in development of character. To point out to those who feel differently on the subject of religious education my stand in this matter, I will say that the teacher of morals theoretically can teach moral ideals without teaching his religion. Practically, his own point of view colors his work and gives it value. To him are open, however, several avenues of service, to none of which can objection be raised: sacred song, the literature of Christendom, a faithful living of the truth as he sees it, and a constant magnifying of the personality of Christ. As Frederick Tracy says in his "Psychology of Adolescence," "From the pedagogical point of view Christianity possesses in the character of its founder, an immeasurable advantage over all other religions that have sought to win the adherence of the sons of men." And again Dr. Yocum says in "Character Education Objectives"³ that "Through its very complexity the character education which makes a few virtues controlling, will, through the interdependence in their elements teach morality through religion, religion through morality, and democracy through both."

To return then to our inculcation of ideals—there are three definite steps in such character training; first, understanding of standards; second, a desire to live up to those standards; and third, strength to carry the purpose into effect. In other words, the teacher must teach the ideal as an ideal, making it seem so desirable that the pupil will wish to attain it. Finally, impulsive power must be obtained through a determination to

strive toward the standard set. To obtain this impulsive power the will must necessarily be cultivated. Some individuals possess a kind of moral intuition as to the distinction between right and wrong, others need careful training in perception. To make clear to the student the ideals of democracy, honesty, courage, self-sacrifice and service to others, with their numerous kindred, is the privilege and duty of the teacher. We should also remember that to the child we may say "don't" and be obeyed; to the adolescent we must say "do" and point him toward a goal. As we shall point out later, adolescence is a time of idealism and in the adolescent's idealistic nature the teacher finds her greatest ally in fighting undesirable tendencies of conduct.

One more attribute of human character has yet to be discussed—habit. The Committee on the Reorganization of Secondary Education in its report on Moral Values in Secondary Education expresses the relation of our next subject to the other elements of character education in these words: "Without habits, ideals degenerate into sentimentalism; without moral understanding and ideals, habit becomes dead routine incapable of growth into new and better ambitions."

Logically and from the point of view of the average teacher, character training is nothing more or less than good habit formation. Upon this basis have been built most of the systematic efforts for character education. "Ideals of right living should become habits of right conduct," says Stout⁴ and most of us heartily agree. Our ideals of right and wrong must bear practical fruit in conduct or they might as well never have been

³N. E. A. Add. and Proc. 1923.

⁴Stout, J. E. Organization and Administration of Religious Education.

taught. On the one hand, bad habits must perish for want of exercise, and on the other, good habits must be stimulated by constant practice.

To show how habit-forming becomes the immediate aim of the teacher, allow me to summarize some of the material presented by T. R. Alderman in his "Measuring Results". Mr. Alderman was, at that time, Superintendent of City Schools in Portland, Oregon; he lists the following qualities as being those used for the observation chart of the schools by which a record of the pupils is kept.

1. Good posture and voice quality.

The first is considered necessary in that it adds to self-respect, and voice quality is noted in order that steps may be taken for voice development.

2. Health.

Health is thus emphasized as an integral part of the course of study.

3. Industry.

Ability to work is considered a habit.

4. Neatness.

5. Elements of leadership and self-control.

6. Willingness to co-operate.

Grudging help is undesirable.

7. Ability to form true judgments.

The common tendency to call for quick thinking in the school room puts a premium on guessing. True judgments require time for formation.

8. Frugality.

There is a moral wrong committed in spending what is not ours to spend.

9. Altruism and helpfulness at home.

The attitude that society owes an individual a living is frowned upon; the opposite attitude is cultivated "The in-

dividual owes something to society."

10. Scholarship.

Mr. Alderman adds "The habit building plan will lead to taking excursions with the child, and entering into the child's labors. It will mean going into situations with the child where sympathy is developed and quick action is required. It will mean placing the child under such circumstances that his ego is for the time lost amid the multiplicity of impressions that flood upon him. It is striking the iron while the iron is hot. It is living with boys and girls, teaching by example as well as by precept. It will mean that every parent will become a teacher. It will mean that every teacher will be at least in some measure *in loco parentis*."

We have learned in modern times that transfer of learning is not as great as was once supposed. How then can we expect a habit of moral conduct in school to apply to all outside relations? The pupil must be checked up by all means at the teacher's disposal. Yet the raising of this question is not meant to mitigate the value of character education in the school. It is merely to point out that many factors outside the reach of the school are also involved. At the same time the modern junior high school offers a life within its walls which is rich and varied and which aims to include the experiences offered by the world outside. Since this is true, the teacher as never before is able to judge the student's character, to inculcate high ideals, and to induce habit-formation of the best type.

The Question of Formal Moral Instruction

The defender of formal moral instruction bases his position on the following facts: first, a moral being possesses intelligence and freedom of choice; second,

^aN. E. A. Add. and Proc. 1913 p. 64-67.

in order to be right he must possess a practical knowledge of right and wrong and a permanent disposition to love and do the right and to hate and avoid wrong. He says that a psychical principle underlies his belief in that knowledge awakens the feelings, the feelings solicit the will and the will determines conduct. Therefore, the instructor of youth should give instruction to his pupil in order that the knowledge acquired may begin the progress that leads to right conduct. Emerson C. White⁶ states his belief in the matter very plainly when he says, "When a lesson on duty fails to interest the young, there is some weakness either in the lesson or its presentation."

Conditions somewhat similar to those in ours exist in other countries, and perhaps a brief view of what is being done elsewhere will help us to view clearly the problem at home. As early as 1906 a movement was set on foot to institute an inquiry into the subject of moral education both in the United Kingdom and in various other countries of the world. It was largely conducted by British educators but the United States contributed its share to the information required through an American committee under Dr. Nicholas Murray Butler, Chairman. The results of this international inquiry were published in 1908 in two volumes under the title "Moral Instruction and Training in Schools." I may summarize the results of the inquiry briefly by saying that they show international practice to indicate three lines of procedure. First, there is the teaching of morals as incidental to religion; second, a transition system of teaching morals both as incidental to religion and as independent of religion; and third, a system in which

the teaching of morals is only as a separate subject unconnected with religious education. To the first class belong the Germany and Russia of pre-war times, Belgium, Denmark, Norway; to the second, Switzerland, Italy, England; to the third, France and Japan. These current practices show the trend of thought in the United States as far as the interrelation of religion and morals is concerned and so deserve further attention.

The survey showed that in Germany no formal instruction in morals was given but that dogmatic and creedal religion was taught in the classes below the University. Russia's system was practically the same. Belgium was orthodox, having no direct secular moral instruction, but placing the teaching of religion under a teacher or clergyman or an appointee of the latter. Of Denmark, Miss Henni H. Forchhammer says, speaking for her country in answer to the questionnaire, "Among advanced educationalists there seems to be an increasing feeling that the want of rational training of the will and character is a weak point in Danish education. . . . In Danish schools there is no systematic moral instruction. The law requires dogmatic religious instruction in all schools for children, both elementary and secondary." Norway⁷ reports "In our school law, religion is placed as the first subject in the curriculum. The religious instruction is in accordance with the doctrines of the Lutheran Church; in the lower classes it is concentrated on Bible history and the catechism, in the higher classes on church history, scriptural doctrine, religious creed and moral philosophy."⁸ But Norway has no separate courses in moral training. To those who are firmly

⁷Sadler—Moral Instruction and Training in Schools, Vol. 2 p. 140, 143, 144.

⁸Same—p. 186.

⁶White, Emerson E., School Management.

convinced that formal moral education is only possible through religious teaching the example of these countries may serve as a precedent. But in each country named, it must be noticed, the creed of only one church is taught. For us, fortunately, religious teaching is impossible in the public schools. Aside from laws dealing with this subject the very complexity of religious thought forbids its teaching.

But shall the school attempt to offer formal moral instruction as separate from religion? Some educators have held that this is impossible also, not only for the United States but also for the world. The prevailing practice forbids our agreement. Several countries are in the midst of an attempted solution of the problem. They find it feasible to offer both religious courses with moral significance and courses taught separately from religion. Switzerland and Italy are in this particular stage of development. The divided practice is also common in England. Since we of America are automatically shut off from religious teaching in the schools, our greatest interest lies in the last group of countries—those that have taken the last step and teach morals as morals, not as religion. Of this group France has long stood the highest, moral and civic instruction having taken the place of religious instruction before the beginning of the twentieth century. The experience of Japan is similar to that of France, perhaps on a higher plane, according to critics. In that country moral education is part of the general system, all of which is based on the Imperial Rescript of 1890, which I quote as exemplifying the spirit of Japanese education.

"Know ye, Our Subjects:

"Our Imperial Ancestors have founded

Our Empire on a basis broad and firmly implanted in virtue: Our subjects ever united in loyalty and filial piety have from generation to generation illustrated the beauty thereof. This is the glory of the fundamental character of Our Empire and herein also lies the source of Our education. Ye, Our subjects, be filial to your parents, affectionate to your brothers and sisters; as husbands and wives be harmonious; as friends true; bear yourselves in modesty and moderation; extend your benevolence to all; pursue learning and cultivate arts, and thereby develop intellectual faculties and perfect moral powers; furthermore, advance public good and promote common interests; always respect the Constitution and observe the laws; should emergency arise, offer yourselves courageously to the State; and thus guard and maintain the prosperity of Our Imperial Throne coeval with heaven and earth. So shall ye not only be Our good and faithful subjects, but render illustrious the best tradition of your forefathers.

"The Way here set forth is indeed the teaching bequeathed by Our Imperial Ancestors, to be observed alike by Their Descendants and the subjects, infallible for all ages and true in all places. It is our wish to lay it to heart in all reverence, in common with you, Our subjects, that we may all thus attain to the same virtue.

"The 30th day of the 10th month of the 23rd year of Meiji."

(Imperial Sign Manual. Imperial Seal.)⁹

In the Japanese system moral instruction is given a definite place in every grade and school in accordance with the spirit of the Rescript.

In our own country moral instruction

⁹Sadler—Moral Instruction and Training in Schools. p. 319-320.

as a definite course has found a place in many schools but never in a national sense. The debate has been, not so much on the question of morals and religion, as on the subject of formal moral instruction vs. incidental. Co-operating with the International Inquiry just quoted was an American committee of foremost educators. Mr. Clifford Barnes, one of the leading spirits of the movement, reported the results of the national inquiry to the National Educational Association in 1909.¹⁰ One thousand United States schools were questioned. Of these 18% believed in graded courses of moral instruction on non-theological lines. Mr. Barnes summarizes the facts as follows: (I have taken the liberty further to condense his statements.)

1. The survey showed a deep interest in moral training felt by teachers.
2. The personality of the teacher was judged the greatest single factor.
3. Every study and school duty should be effective in itself and thus contribute to moral education.
4. Systematic moral instruction was favored where tried and in disfavor where unknown.
5. The consensus of opinion seemed to admit the moral value of direct moral instruction if timely and wise.
6. There was a high regard shown for the Bible and for religious exercises where used, and opposition to them where not used.
7. There was a strong tendency to conservatism.
8. The American home and social life was generally condemned as a hindrance to moral teaching.

Coming closer to our own day, the at-

titude of both the exponents and the opponents of this movement is well stated in the report given by the Committee on the Reorganization of Secondary Education to the National Educational Association in 1923 on Moral Values in Secondary Education. The advantages and disadvantages of a distinct course in moral instruction follow.¹¹

Advantages

1. It expands and deepens the moral insight of students.
2. The school shows that it considers moral thinking important.
3. The subject is insured against neglect.
4. More complete consideration of moral truths is made possible, both the broad principles and the details.

Disadvantages

1. Other moral opportunities of the school may be slighted.
2. The teacher may make this course an imitation of college ethics.

Many would add to the arguments against moral education that such a course would be a departure from precedent and that morals must be lived not merely understood. The defenders of the measure would assent to both propositions in part. "But," they would answer, "you can only be referring to precedent in the United States, and even that does not hold if you recall the earliest schools. Moreover, we do not advocate a mere moral code, memorized by the pupil, but a concrete teaching of morals by specific example."

Mr. Arthur Deerin Call, formerly district superintendent of Hartford, Conn., would add¹² that "direct training in

¹¹See N. E. A. 1923.

¹²N. E. A. Addresses and Proceedings, 1909. p. 232-238.

¹⁰N. E. A. Addresses and Proceedings, 1909. p. 129-140.

morals serves to open the eyes of the morally blind, to clear away moral confusions as to questions of right and wrong, and to forestall moral vacillation, acting on impulse."

The position of the present writer will be clearly understood later. For present purposes it suffices to say that courses in moral instruction as such must always be considered in the light of local needs.

The Junior High School and Character Education

Character development is a growth not a spasm. From the unmoral child to the awakening adolescent and from the adolescent to the adult we look for constant progress. Thus, when something of a wrong nature appears in adolescence, the teacher investigates the childhood of her pupil, notes the coming of the signs of adolescence and prepares her plans accordingly. The senior high school principal surveys the pupils coming from the junior high school with the expectation of seeing well-developed personalities; the college judges the senior high school by its graduates and the world judges all three (or four) by the products they send out to live with their fellow-beings. At present the world seems somewhat dissatisfied with the products. The case of Loeb and Leopold has not yet been entirely forgotten and instances of adolescent crime are becoming too frequent to be ignored. The words of Judge McIntyre (quoted earlier) ring with meaning when he says that most of our criminals are young people. The school has not fairly met the question.

"Much has been said and written recently about methods of instruction. There has been a renaissance of educational methods, and yet Dr. Bagley tells us that the crime wave is higher in the

United States than in any other nation—that the criminal age is younger in the United States than in any other land. We are appealed to as educators to suggest a remedy. Remedial measures for such conditions are essential and should demand more thought than methods of imparting subject matter. Project methods, socialized recitations, motivation are all intellectualized instead of spiritualized."¹⁸

The people have never before demanded character education of the school; they have taken it for granted; but with such alarming statements and statistics before them, they will soon do more than demand. I am aware that the expression of such a threat is hardly in good taste, but I wish the situation to appear in all its seriousness to the unpersuaded. My view is not that of a pessimist, for I believe that the schools will answer the call, as they have answered the call for vocational education, with their full energy.

The Junior High School must needs play a peculiar part in any attempted program. First, the junior high school itself is new, and, by valuable service in this matter, may win an unshakable place in public esteem. Second, the adolescent period with which the junior high school deals is the most dangerous of all school ages. Third, the junior high school has made its way into public notice by asserting that it prepares the adolescent better for society than the old type of school and the public is now waiting to see it prove its assertion. For these reasons it behooves the junior high school to examine carefully into the matter of character education.

¹⁸Gray, Jessie—How the Teacher Molds Character. (In N. E. A. Addresses and Proceedings, 1925.)

The most acute problems of the youth's life arise during the years of early adolescence. He feels himself almost a man, demands and exercises greater independence of action and freedom of judgment. Yet here the junior high school has its opportunity, for with all this added liberty the adolescent remains plastic and responsive. It is the time for action, for during these formative years character is given its final development. The modern junior high school student apparently has gained some virtues not noticeable at earlier periods: frankness, freedom from hypocrisy and cant, independence, self-reliance, and ambition. Those who extol these virtues, however, forget that they are often too *apparent* to be true, and even when real, are the hardest of all virtues to keep under control. With them has come their extreme development—the vice of selfishness, not a selfishness of which the possessor is ashamed, but a selfishness elevated to the dignity of a philosophy.

The moral life of the adolescent deals in extremes. Since we have looked upon the darker side, we must look upon the brighter. Frederick Tracy in "The Psychology of Adolescence" tells us that while the curve of crime among adolescents is highest at fifteen, that of conversion is highest at sixteen. With the lowest lapses come the highest aspirations. The adolescent is apt to limit his perspective and endeavor to attain perfection in a rigid, mechanical, quantitative sense. Self-examination and introspection are carried to an extreme and the adolescent is likely to become discouraged to the point of committing suicide. Healthful activity is necessary. The child experiences transient emotions; the youth strong, conspicuously

higher and complex emotions, due to the general expansion of power and capacity. In childhood an individual's conduct is dictated by external authority; in adolescence by self-imposed requirements. As never before ideals play a large part in the moral life of the individual. Here lies an advantage for the ready teacher.

New instincts arise in adolescence, or rather, old instincts become predominant: gregariousness, exploration, migration, organization, domination, co-operation. The danger as always lies in the development of one or several of these instincts in such a way as to overbalance the system. For example, domination, carried too far, becomes selfishness; coupled with co-operation or organization, it may result in "gangs" destructive of social welfare. Properly directed, however, each developing instinct serves a vital purpose in producing a well rounded character.

The emotions of adolescence have already been mentioned. To them may be added an admiration of great characters amounting to hero-worship, desire for rank, for approbation, for power, and, on the other side, a sense of honor and of duty seldom surpassed. Their longings and dreams contain definite ethical values and are a source of inspiration. It is this strange mixture of intense emotions and dominating instincts that forms at once the danger and the opportunity of the junior high school. And, of course, the physical changes which mark puberty lie also at the basis of the problem.

From this basis, therefore, we may lay down some conclusions as to the pedagogy of adolescence. To quote Frederick Tracy again, he speaks of the following characteristics of education: (not quoted in full).

1. Adolescent education should be free, joyous, unconstrained. Supervision must be unobtrusive.

2. The concrete and abstract appear in a new light.

3. Acquaintance with nature should be made.

4. There must be contact of personality with personality.

For more specific principles he says:

1. A healthy body—work and play has each its part.

2. Instincts and habit formation bear an important relation to adolescent education as a whole.

3. Moral education—the ethical end includes the intellectual, emotional and volitional.

There should be a maximum of reasoned, deliberate, and free action and a minimum of implicit obedience to authority. (But this must not be held to imply freedom destructive to social welfare.)

4. Education of sex—nowhere is the penalty of failure or indiscretion greater.

5. Religious education—the ideal of personality should be taught.

With this hasty survey of the importance of character education in the junior high school we will pass to the consideration of a practical program.

A Practical Program for the Junior High School

In 1922 the Committee on Character Education reported to the National Educational Association their conviction:

1. That the course of study and activities of the school should be so organized as to realize in both theory and practice all the objectives of character education. (In order to do this they advocated reconstruction of the school courses and *definite moral study*.)

2. That we recognize "Love of God and love of fellow-men as an axiomatic basis of the moral life."

3. That all teachers should be as deliberately instructed in the fundamentals of ethics as they are in the fundamentals of their mother tongue.

The final report of the same committee in 1925 emphasizes the following points:

1. The process of character education takes place through development and organization of the natural powers of the child; this development and organization is greatly accelerated by concentrating the energies of the individual upon the realization of a life-purpose.

2. Conscious intervention in the process of character education is concerned with the positive development of personality.

3. In the process of character development in the schools curricular materials and classroom methods best contribute towards the ends of character education when they are purposeful to the pupils and are at the same time socially valuable.

4. Best character education results in school community life where the pupils participate in the responsibilities of managing their community life.

5. If society is to attain satisfactory results in character education it must devise ways and means of enlisting the most capable young people who have teaching personalities.

The author has endeavored, in formulating a program, to work in accordance with these last two reports.

In order to agree with the general terminology on this subject the program referred to will deal first with formal or direct moral education and then with the incidental means of character education at the junior high school's disposal. The

latter phrase is somewhat misleading but is currently used. By "incidental means" is meant anything aside from a definite course in morals, even though these means are as vital to the problem as is the definite course. Character education is a broader term than moral instruction, and many things in the school contribute to it. All must be considered.

A. Formal moral education.

In the United States one of the difficulties in formal moral instruction has been the lack of text-books. As I said before, the American ideal is concrete teaching by definite example, and the text-books of Europe are not fitted to our needs. This phase of the question of education is especially noticeable in the junior high school and here if anywhere should be placed a formal course in morals. Where taught, morals have been commonly considered a subject for the lower grades. But even as the study of English begins with the beginning of a child's life, so surely should morals, which train for present and later social and spiritual reactions. But we do not stop English with the 6th grade, why should we morals? As I have already pointed out, a considerable burden is placed upon the junior high school in this problem. Surely, the adolescent with his awakening and deepening physical, emotional, volitional and intellectual nature is in greater need of moral training than an individual at any other stage of development. For these reasons the junior high school must and rightly should carefully consider its moral obligations to its adolescent pupil. He must be taught how to use his greater freedom of thought and conduct, and how better than through ethical teaching?

It has already been said that where formal moral instruction is given it is

highly favored by the faculty, and where unknown only is in disfavor. This speaks well for the movement. It has only to educate the educated and its end will be assured. Let a few of those who have proved its worth speak for themselves.

Professor Frank Chapman Sharp of Wisconsin reports the use of his "Manual of Moral Instruction" for the Senior class of the Menominee High School, Wisconsin. He says that although the subject is elective, it is taken by most of the students. It deals with the means to success, and what constitutes true success in life. The results have been highly gratifying.¹⁴

Mr. Massillon Cassidy, Superintendent of Schools of Lexington, Ky., tells of the plan followed there, widely known as the "Golden Deeds" plan. Adopted twenty-three years ago it is still working with success, so Mr. Cassidy thinks.¹⁵ Various character traits are discussed in the classroom. Each pupil endeavors to notice and report deeds illustrative of the trait discussed. These deeds are also considered in the classroom and credit assigned to the one reporting them. He keeps a written record of his reports and for the best "Book of Golden Deeds" a prize is offered. Biography is largely used by the teacher also to call attention to the various traits. In other words it is a case of "teaching by example." Where such a system exists in the grades it can profitably be carried over into the junior high school. Some junior high schools, however, will find the plan of Salt Lake City better suited to their needs.

¹⁴N. E. A. Addresses and Proceedings, 1909, p. 141-145.

¹⁵N. E. A. Addresses and Proceedings, 1920, p. 523-525.

Ernest A. Smith, Superintendent of Schools in Salt Lake City, Utah, discussed the system in use there before the National Educational Association in 1920.¹⁶ By law the schools' enrollment is for twelve months in the year and the pupils are supervised both at school and at their summer work up to the age of eighteen. In the elementary schools of this city moral and civic instruction is given. Hutchin's code already referred to, with its Ten Laws of a Good American is memorized. In the junior high school each pupil fills out the score card of the Good Junior Citizen judging himself, and the teacher is guided by the score.

Examples could be multiplied but these suffice to show that definite moral instruction is feasible for the junior high school. Next, when and how should it be offered? (It goes without saying that only exceptionally fine teachers are qualified for the work;—that is a problem we shall consider later.) Since the course in morals is not an exploratory course, it cannot be placed in the 7th grade only. It must run through the 7th, 8th and 9th grades as a required subject. The time given it will vary as conditions allow from one or two hours a week to a full five-period course. This applies only when space can be made in the already overcrowded program of studies for another required subject.

In many instances the administrator will find it impracticable to place a course in morals among the required courses in the regular program. If his school is small, he may utilize some of the time daily for a "morning exercise" or an assembly period. Ethical talks can here be given, and a real class in morality

offered with the pupils hardly being conscious of the fact. One caution must ever be kept in mind: "Teaching morals does not mean being didactic." The idea which M. M. George uses in his "Character Building" has a bit of valuable advice for the administrator who must use this plan: "Have a month's theme and dwell on all its aspects."

In the larger school this scheme is more practicable because of the number of teachers. Wherever the "Home Room" organization is present, the problem is solved for the home-room teacher is usually better able to grasp the needs of her pupils and to meet their problems with right solutions. Her office has often been underestimated—here is a chance for its exaltation.

This is not a text-book on morals and the author might endeavor to point out some other ways and means. The purpose of this article is fulfilled, however, if it aids a little in pointing out possibilities.

B. Incidental Means.

Whether or not formal moral instruction is given in the junior high school, characters must be builded, and are, even though unconsciously. The fact that a course in morals is offered is no excuse for neglecting other means of aiding the production of true, strong manhood and womanhood. If a definite course is not offered, all the more reason for emphasizing these other and primary means.

Among these means are (1) the general spirit of the school, (2) the pupils' activities, (3) the regular course of study, and (4) the teacher. The general spirit of the school—the esprit the corps—that we must realize as a character-building force. Many factors contribute to it; for example the appearance of the building and classrooms; the clean, sani-

¹⁶N. E. A. Addresses and Proceedings, 1920, p. 471-474.

tary, effective houses in which the pupils live their school-community life. The discipline and routine of the school have their part, the work of both the good administrator and the good teacher. If everything runs smoothly, without friction but with evident order, it will necessarily induce well-ordered lives on the part of the pupils. What does all this mean? It means

1. A just and wise administration.
2. A fair but effective discipline.
3. Good teaching of the regular school subjects.
4. A spirit of *work* not commonly found in the junior high school.
5. The cultivation through these means of a mind habitually attentive, a spirit possessed with the ideas of fair play, and honest work, and a clean physical self.

One of the most effective as well as the most easily ill-used powers in the junior high school is the student himself. In the student activities then is the possibility of great moral education. In them the pupil meets the problems of a corporate life, he realizes his obligation to others, and, by his very activity, he interests himself in giving help. A caution here may be given. We are too apt in the junior high school to think that experience alone will teach our pupils; sometimes they need more than experience, they need interpretation of experience. A concrete example will illustrate what I mean. "James Reynolds was disappointed in playing football. He wished to be the star player, and when he proved unable to gain that place, he became angry and refused to play at all. One of his teachers, noticing the scene, persuaded James to take part in a dramatic production. An important part was assigned to him, and he played it

well. After the final production the teacher asked James about being the star of the cast. "Was he proud of it? Did he feel that he *made* the play?" Why no, all the players had helped. Then the teacher pressed the lesson home. "How had it been on the football field?"

Of the many examples of pupil activities that present themselves I will only mention a few. First we have the registration of pupils by pupils. This plan has been tried in the Washington Irving High School, New York, as a means of creating school spirit, responsibility, courtesy to others and friendliness. The newcomers are registered alphabetically, and the reception committee is composed of pupils. They show the newcomers what to do, show them over the building, interest them in the clubs, etc., and welcome them as equals to their future alma mater.

After entrance into school pupil participation in school affairs should be continued. I merely mention the clubs so customary for the junior high school—they are an important help and are often and adequately discussed. I should, however, like to consider pupil participation in the assembly and the unsupervised study period. The same principles work in both, co-operative with each other and with the teacher, responsibility, honesty, loyalty. Personal preferences are laid aside for the good of the group and the upholding of right standards.

Self-organized group-work is another means of training for citizenship and for character (the two are often intermingled). The Ethical Culture School, New York City, tells of one of its 8-A classes spending a summer in the country raising food. When the pupils reported the affair in the school paper—which, by the

way is another aid to character education—they acknowledged the benefit they had obtained by co-operation.

I have left self-government till the last. It is really a disciplinary problem in part, but it also deals with student participation in school affairs. True self-government is what James Y. Joyner is describing when he says:

"From the very nature of a democracy, all authority must be derived from the consent of the governed and must be exercised for the benefit of the governed. . . . Education that provides preparation for democracy must lay special emphasis upon the distinctive principles and the distinctive virtues demanded for efficient democratic government. . . . Every public school in America, therefore, should be a place for the inculcation of democratic principles and for the cultivation of democratic virtues (school itself a democracy).

. . . "Self-reliance, self-determination, self-direction, self-restraint, self-government are individual virtues most essential to the successful exercises of the privileges of political self-government and for the proper restraint of the freedom of democracy. Co-operation, team-work for the common good, consideration for the rights of others, tolerance of the rights of others, freedom and independence of thought, and prompt obedience to properly constituted authority are other virtues, the cultivation of which is an essential part of preparation for citizenship in a democracy."¹⁷

In other words self-government means the sharing of the responsibilities of the school community, and, whether that sharing be through the form of a school

city or what not it should accomplish character education. Only remember that it can never be given to pupils, the step must be desired by them. As M. Carr says¹⁸ it must not be too expensive, require too much time from school work, but it must deal with proper standards of conduct and business methods.

We come now to the old, old idea of teaching morals through the regular school subjects, and at once someone says "Oh, yes, that means English and History again." Yes, it means that but much more. It means every subject in the curriculum—both its subject matter and the method of teaching it. Remember it is not necessary to "tag" a moral but never be afraid to create ideals. Since you have heard of English and History so often, suppose we take them first. Here are a few don'ts for the social studies:

1. Don't point a moral by presenting a fact unwarranted by sound scholarship.
2. Don't call history "the biography of great men" nor place all the emphasis on "mass action."
3. Don't over-emphasize the economic interpretation or minimize the force of ideals.

Take David S. Muzzey's advice on that last: "It is not kings and dynasties, campaigns and statutes, that we have to study primarily, but problems; and problems are history in the making. Unless the historians can find the moral problem in the event of the past, he is dealing with dry bones."¹⁹

The Committee on the Reorganization of Secondary Education gives some valuable suggestions as to ethical lessons in social studies that I may briefly summarize:

¹⁷N. E. A. Addresses and Proceedings, 1916, p. 79-82.

¹⁸N. E. A. Addresses and Proceedings, 1916, p. 351-377.

¹⁹Muzzey—Ethical Values in History.

1. Conceptions of social heredity.

Example—the ships arriving in Jamestown, Va. in 1619 with its first cargo of slaves—the effect.

2. Social progress.

Prevailing practices are not always right and yet we must never minimize the good in present institutions for “A dwarf perched upon the shoulders of a giant” sees farther than a giant does; but he should remember why.

3. Liberty means participation in common duties, not enjoyment of privileges; equality means equality of possibility, not of intelligence, character or power.

4. Respect for superiority.

Superiority in ability and possibility in the undeveloped.

5. Sympathetic appreciation of national ideals other than our own.

6. Study of biography.

7. Group life: ways of earning a living; social classes, their conflicts and adjustments, attitudes towards those who differ—tolerance, intolerance, democratic appreciation and encouragement; patriotism and changes in the conception of loyalty; science—relating to health, individual transportation, social intercourse, war and peace, education, changing moral standards.

Literature has all the values of the social studies and we may perhaps pass over it, with the advice to remember that it is first of all to be enjoyed and then to be criticized in the light of its best definition “Literature is the *true* interpretation of life in *lasting* words.” Composition is so often omitted that I should like to say three things concerning it. First, it consists of the efficient imparting of ideas to others. The pupil may thus learn to be honest with himself realizing his own limitations. Second, it

teaches one to take the point of view of others. Third, the teacher should instill a new principle into oral contests. They are not held in order that one person may win, but in order that the truth may be clarified in the minds of the audiences.

For the ethical value of foreign language I refer you to English Literature and from there to the social studies, with two additions: inculcate respect for other nations, and in translations, responsibility for reporting what another person says correctly both in letter and in spirit.

In the Natural Sciences correlate the lessons with History; teach new biographies—not those of warriors; show what truth really means; and teach the “importance of open-minded investment, need of reserving judgment, duty of reporting observation accurately.” Science in any form is one of the best devices to teach truth of which I know. Mathematics falls in the same sphere with its text-book comprising contributions from many countries, and requiring proof.

And now we come to subjects not commonly considered of great value for moral teaching. Let me give you in brief the recommendations of the Committee on the Reorganization of Secondary Education. First—household arts may show:

1. The place of the home in history.
2. The social forces effecting the home (urbanization, etc.)
3. Responsibility of the consumer.
4. Co-operative societies.
5. Extravagance and thrift.
6. That beauty stimulates, luxury enervates.
7. Health problems.

Second, the fine arts and music may help to

1. A worthy use of leisure.

2. Satisfy the distinct craving of the adolescent for beauty.

3. Draw analogies between beauty and noble living.

4. Teamwork through group activities in music and dramatization.

Third, vocational guidance and education can

1. Combat false notions of greater merit of the "gentlemanly" callings.

2. Give compelling motives for entering upon the daily studies in the right spirit.

3. Emphasize not quickness but careful training.

4. Stress the varying points-of-view of: (1) Employers and employed (both the servants of the society),

5. Show that making a living should help not hinder the making of lives.

And lastly—physical education gives great opportunity to show that

1. Physical and moral vigor are intimately connected.

2. We must not be too eager for victories.

3. We are helped by it to self-control, self-discipline and self-confidence.

And with the true physical education the problem of sex hygiene becomes merely one item of self-control.

The last force and the force most frequently acknowledged to be the greatest of all in character education is the teacher. Everything that has gone before this point hinges upon it. The teacher's personality is the most potent factor for good or bad in the school—and this because of the power of example and the adolescent's tendency to hero-worship and imitation. Moral influence and character cannot be divorced.

A law was suggested many years ago which should be well today: "No man or woman shall enter here (the school) as

a teacher, whose character and life are not fit models for the young to copy." We need scarcely continue this discussion for surely you agree with me. Here is just one example of countless numbers which show the influence of teachers.

Mr. H. H. Cummings makes this remark concerning Latter Day Saints Schools of Salt Lake City, Utah, of which he was formerly superintendent. "Of the 400 teachers in the schools with which I have the honor to be connected, three fourths of whom are males, not one smokes; as a consequence not 1% of the boys smoke after attending a short time."²⁰ Listen to that, city, county and local school men!

Jessie Gray, President of the Pennsylvania State Educational Association, offers as a remedy for the crime wave, "We must select teachers more wisely—not allow all who will to be trained, but those whose lives have shown preparation for the rare privileges of 'examplifying' the youth. Those finer souls in our high schools who are thorough, earnest, who scorn to cheat either themselves or others, who are industrious, unselfish, good to live with. Mark them as educators and select them for the finest service that offers to humanity."²¹

Let me quote again from the Committee on Character Education.²² They are giving the requirements of training for a teachers who would teach morals.

1. Study of the psychology and hygiene of childhood and adolescence.

2. Study of ethics with reference especially to the nature of society and civilization and the resulting moral obligations of the individual. The aim is to

²⁰N. E. A. Addresses and Proceedings, 1910, p. 180-185.

²¹N. E. A. Addresses and Proceedings, 1925, p. —

²²N. E. A. Addresses and Proceedings, 1923.

develop in the teacher high ideals and a keen sense of social justice.)

3. Study of character educational methods based upon an analysis of character education objectives and their functions in the control of individual and group conduct.

4. Planning of course of study and the organization of all school activities with a view to their contributing most to the formation of personal and social habits in line with objectives.

5. Practice in applying objectives.

6. "Conduct clinics."

7. Self-government.

8. Co-operation with family, church, civic and voluntary organizations.

9. Church religious and moral instructor.

Train our teachers like this, add the endowment of a loving heart, a sympathetic spirit, and pure, clear Christian manhood or womanhood, and the problem of the junior high school is solved.

Revision of College Entrance Requirements

The Association at its meeting in March went on record again, by means of a formal resolution, in favor of having "the colleges included within the North Central territory revise their terms of admission in such a manner as to permit students to qualify for entrance on the basis of units of work, eleven or twelve in number, accomplished in the tenth, eleventh and twelfth grades or the last three grades of the secondary schools."

Furthermore, the Association voted to raise a committee whose function is to formulate a workable plan for the re-statement of entrance requirements in terms of the senior high school.

This committee will report in March, 1927.

The Project Method in Education

LEONA SPIELMAN, ADRIAN, MICHIGAN

We are living today in a great transition period. It is a period in which new inventions and new ideas are coming to us thick and fast. Into whatever field we turn we can witness a change from the old mode of procedure. So in the field of education. Today in the light of all our modern psychology and philosophy we are holding up to ridicule some of the educational ideas held by people a generation or two ago. Even our mothers and fathers can tell us of pedagogues who "ruled with an iron hand," grave disciplinarians, who with a blow of the fist or a crack of the rod meted out punishments to wayward pupils whose slowness may have been due to regressive eye movements, faulty vision of some sort, or other physical defect; whose sole idea of education seemed to have been to make school work as dry and uninteresting as possible, in order that disciplinary value might be gained thereby; who drilled on the fundamentals with a rigidity that shocks the minds of our modern free thinkers. We look back over these days and we wonder how teachers and instructors could have been so devoid of educational "sense." We are so far removed from such methods and the pendulum has swung so far to the other extreme that it is natural for such a reaction. Nevertheless, in discussing our present educational methods, there is one thing we must keep uppermost in our minds. Naturally we are partial to the present, but we should not be unmindful of the fact that someday we, too, will be termed "out-of-date."

We should not be too dogmatically sure of ourselves and our modern ideas. We must have a respect for the past as we expect future generations to have respect for us.

Today in our effort to direct the educational trend to the other extreme we hear much of the project method as it is being carried out in school work. It is a method which has been used during the past two or three years, but only very recently have we come to know it as the "project method." It has been carried out with much success in some of our widely known High Schools, and is a movement which is rapidly gaining in popularity and promises great returns for the future. In so far as any system succeeds it must be based on some sound philosophy of life. Only when it has its foundations there will it be secure. That is the reason why we may be reasonably sure of our project method and depend upon its being a corner stone in the educational structure. It does rest on a sound philosophy.

When we think of the word "project" itself, we must think of it in terms of its Latin derivation, i. e. *pro-ject* from *pro* and *iaceo*, in the sense of something being projected or thrown forward, thrown forward into the future. In the word is the idea of something purposed. Some end lies in the future for which we are laboring in the present to achieve.

Now this purposeful activity is one of the peculiar characteristics of a human life. Herein lies the one great reason whereby man takes precedence

over the animal. The animal is wafted along by Fate and has no control over his future behavior. He struggles along by the trial and error process; he establishes habits, but in no wise is he capable of executing purposive behavior. The mind of man, however, possessed of that theological or purposive outlook, anticipates the future in the light of past experience and governs his present actions. In short, he makes effects precede and determine their causes.

Not only is purposive activity the peculiar characteristic of human life, but it is the typical unit of the worthy life. Not that all purposes are good but that worthy life consists of purposive activity and not of mere drifting. We scorn the man who passively accepts whatever Fate wafts to his doors. We admire the man who is master of his fate, who sets out in life with a definitely defined goal, with far-reaching purposes and then directs all of his actions to the end of attaining them. A man who so habitually regulates his life, along worthy social aims, meets at once the demands of practical efficiency, and is our ideal of a fine democratic citizen.

As purposive activity is the typical unit of the worthy life, so also should it be the typical unit of our school life. At present educators are primarily concerned with relating education to life. What is our educational process for? To discipline pupils and to cram them full with an incredible amount of formulae, theories, and meaningless facts? Such was the old idea. But for us today the fundamental meaning of education must be stated in terms of its Latin derivation, i. e. *e-duco* . . . to lead out. Truly then, our primary duty as teachers and educators is to be loyal to the meaning of the word; to lead our

children out; to help them to discover their latent possibilities; to develop them to be well-rounded worthy citizens; in short . . . to make them useful and happy.

In days not altogether past, emphasis was placed almost, if not entirely, upon subject matter. A systematic organization of material was presented and it was the duty of the teacher to see that it was mastered by the pupil. Whether it was interesting to him or not was of no concern. He was merely the victim. No thought was given to his inner make-up, his thoughts, his interests, his emotions. Surely school was not making him happy and it is even doubtful in some cases whether it was helping him to be useful.

Only recently have we begun to study child-psychology, the instincts and emotions of the child, his physical and mental make-up. Now educators are insisting that emphasis be placed upon the child. The cry is that we teach children, not subject-matter. It is our duty to prepare our pupils to be truly worthy citizens, and, as Briggs says, "to prepare our students to do better the things which they would do anyway." We must prepare them to live. One of John Dewey's world known educational slogans is "We learn to do, by doing," and there is certainly no room to doubt its validity. The only practical and economical way to learn to do a thing is actually to do it. If our educational process is to make future worthy citizens practice must be started during school years. We must teach our children to live . . . to live well, and they must be given this practical training in school life. In other words we must identify *education* with *life*. Now if purposive activity is the unit of a worthy life, then TO BASE EDUCATION ON PURPOSEFUL ACTS OR THE

PROJECT METHOD IS EXACTLY TO CARRY OUT THIS IDENTIFICATION.

A second reason why the project method is one of great promise is because it utilizes and directs into proper channels certain fundamental instincts. Human instincts are the great driving forces of the race. They are great mainsprings of action. Why is it that children will labor to the point of exhaustion, making a snow house, digging a trench, or painting a wall as Mark Twain informs us about Tom Sawyer? Surely these things are tasks, and if they were ordered to be done it would only be with the most painful effort that they would even be attempted. What is the reason for such overflowing energy? Instincts. As Professor McDougall says: "They (instincts) determine the end of all activities and supply the driving power by which all mental activities are sustained; and all the complex intellectual apparatus of the most highly developed mind is but a means toward these ends, is but the instrument by which these impulses seek their satisfaction, while pleasure and pain do but serve to guide them in their choice of means. . . . Take away these instinctive dispositions with their powerful impulses and the organism would become incapable of activity of any kind it would lie inert and motionless like a wonderful clockwork whose mainspring had been removed or a steam engine whose fires had been drawn."

From Prof. Lawrence A. Averill in his book on Educational Psychology we read the importance of basing education on these instincts. "The instincts comprise the original motive power of the whole learning process. Children are after all but restless steam engines, whose throttles are the instincts: open them a little

and the steam rushes into the cylinders, causing the wheels of action to revolve; pull them wide open and they spin madly ahead; neglect to open them and only some externally applied force will turn the wheels. Apply the metaphor; if we leave the instincts out of account in the teaching of children we shall be laboring with lifeless and inert people, whose self-propelling force is dead."

In project work we are utilizing these instinctive urges. We have a vast amount of inherent energy expended for the attainment of some end, some purpose! What could be more satisfactory? Instinctive behavior directed toward some worthy end! Surely, a noble life is nothing more than that. The method is based on such sound philosophy that it is certain to be the greatest achievement in the field of education, if it is but carried out properly and wisely by instructors.

There are various kinds of projects which educators have recognized and also various conceptions as to what constitutes a real project. Many teachers fail to distinguish between a project and a mere problem. Usually the term project refers to a rather large unit of subject matter . . . a task which covers some rather lengthy period of time. The term problem usually has reference to work on a smaller scale. Several problems or difficulties might arise in the working out of some project. Some, who fail to recognize the psychological element, think that any piece of work that is carried out is a project, regardless of whether the child wearies at the task or approaches it from the standpoint of dire compulsion. Kilpatrick, however, holds the psychological factor is an essential element in all learning processes. The child who approaches a piece of

work in an attitude of compulsion and weariness surely is not dominated by a clear, strong purpose, and this is one of the foundations of the project. This, therefore, should be the primary way in which it differs from any other piece of regular school work. "According as the animating purpose varies and increases in strength, the project approaches fullness." A hard and fast dividing line is impossible to fix but it is certain that the child must work with a certain amount of wholeheartedness or the project will fail to accomplish the end for which it was established.

There are many different classifications of projects. Professor Mendel E. Branom enumerates them as follows:

A. Manual Projects.

1. Learning to do. (skill).
2. Learning to solve. (Interpretation of a situation).

B. Mental Projects.

1. Informational.
2. Interpretational.

C. Emotional Projects. (In which desirable reaction is appreciation or desirable attitudes).

1. Simple.
2. Disconnected.
3. Intellectualized.

Manual projects involve manual labor. Any skill which is acquired like learning to cook, or sew, is a manual project pure and simple. Learning to solve a situation is another type of manual project. Life is full of such situations. A boy may learn how to make a kite that will fly, or a boat that will float. There are many situations that the farmer boy is called upon to solve. He may set out to solve the problem of protecting the fruit from undesirable birds, or of ridding his home environment of flies or mosquitoes.

Mental projects are characterized by an absence of manual activity with emphasis strictly on the intellect. A mental project may involve questions, exercises or problems or complex situations. If a boy has made a study of all the aspects of a garden, has planned out every step in advance and imaged it from beginning to end, he has solved a mental project. A landscape gardener plans out his entire job; an architect plans for his structure. These acts are purely mental; the physical or manual activity follows.

Mental projects also may involve interpretations of various situations . . . appreciation of various social questions, perhaps, as: "Is a league of nations under present conditions practicable?" or "Is prohibition desirable?"

Emotional projects have their characteristic representation in music, literature, and art.

Harmonious situations have a simple reaction on the part of the person because of unity of impression, mode, or arrangement of the parts of a picture, or a piece of music.

Interrupted projects are similar to harmonious projects except that the even movement or impression is unexpectedly interrupted. In music, for example, a selection may be proceeding smoothly, and be suddenly interrupted to represent hoof beats of a galloping horse, or the breaking out of a battle. In art, the whole statue may harmonize with some special exception, as a statue of peace, for example, with a sword in hand. If a child appreciates the harmonious and disconnected projects, he is said to have an artistic nature.

The intellectualized emotional project may resolve itself into a problem project. Some occasions may excite an instinctive response from the individual in such a

way that he adapts himself sympathetically. In many instances a situation may arise that requires considerable thought in its artistic expression. The broader the experience of the individual, the greater the extent to which discrimination may enter in.

In carrying out project work in the class room, there are many things which must be considered. Above all it requires a skilled teacher, well versed in child psychology, with a knowledge of the field. The path is not so narrow and stereotyped that she will encounter Scylla by avoiding Charybdis but nevertheless a few points must be given attention.

First, the teacher must understand the past experience of her pupils. She must know their mental progress, and present material for projects in accord with their past experience and knowledge. This material must not be too difficult or advanced to quell curiosity, nor too easy and monotonous that it fails to arouse interest.

Second, the teacher must adapt the work to the pupil's environment, creating situations which have an immediate interest for him.

Third, project material must be presented in a maturing sequence. Projects must begin with the simple and move toward the complex. They should advance in complexity with the maturity of the child. As the child matures and grows in breadth of view the material must ever be enriched and varied.

Fourth, the teacher must be certain that the purpose really is in the minds of the pupils . . . not just her own purpose carried out by them. If the purpose is in the teacher, the pupils will study and work only with the idea of pleasing her. Only in so far as the pupils manifest a purpose of their own does

the project work differ from the traditional mode of class procedure. The project must be the pupils', not the teacher's, and only by the fruits of their work will she be able to judge. The teacher should create situations and stimulate the pupils. The pupils should formulate their own purpose, set up their own end. This is the important factor. The end in one sense is the project. It stimulates zeal, determines the choice of means, and guides the activity. The end is the pupils' lodestar. When they lose sight of it they are like mariners without a compass.

Teachers have so well adapted this project method to class room work that there are many schools to which we may turn to witness a highly successful procedure. The Panama Canal Project as worked out in an eighth grade class in the Gatewood School, Seattle, Washington, furnishes some valuable suggestions. The following is an excerpt from "The Panama Canal, an Eighth Grade Project," by Worth McClure and Emma D. Stone, published in the *Elementary School Journal* for April, 1921.

"The building of a miniature Panama Canal grew out of the eighth grade class work in commercial and industrial geography. The group comprised thirty-five pupils, ranging in age from thirteen to seventeen years. An engineering staff was selected to assume general charge of construction and planning. Instructions were brief and simple: a working plan must be drawn to scale and the model constructed according to plans. The choice of a suitable scale was a problem in itself, and eventually three were found necessary, one for the vertical plane, one for the horizontal and, in order that the completed model might function properly, a third for the locks. Profile and

bird's eye maps were drawn upon the blackboard. A special table twelve feet long was built for the exhibit. Sand was used for laying out the landscape, modeled after the blackboard plans. Next came the problem of making the canal, the lakes and the oceans hold water. Manual arts clay was tried and found unsuitable. Concrete work was considered but given up. Finally, parowax proved an adequate water-proofing substance when applied to the moist clay, and held twenty-five gallons of bounding main in its proper place! Before the locks themselves were started a trip was taken to the Lake Washington canal for the purpose of studying real locks in operation.

The first set of locks built proved a dismal failure, owing to the fact that the water loosened the cement on the rubber gate hinges and the vertical edges where they met in closing. It was also discovered that despite the application of several packages of parowax, the bed of the canal and lakes still leaked. The engineers tested out new expedients. Woolen felt was ultimately found to be superior to rubber on the locks, while to meet the leak problem troughs were devised and set up in the proper places under the lakes and the seas to conduct the seepage safely into the drain bucket. It was discovered when testing day came that the water discharged into the ocean from the locks, automatically taken care of at Panama, must, owing to the smallness of the model, have some supplementary receptacle. A waste pipe was therefore inserted in the rim of the Atlantic and another in the Pacific. These pipes led by a small gas hose into the drain bucket.

After the topographical features had all been carefully modeled, according to the blackboard plans, several essential

improvements suggested themselves. Among these were the item of vegetation, the provision of real boats for demonstration purposes, the coloring of the water to the requisite blue of the tropics, and the drawing of a map of the isthmus whereby it could be easily explained why the east end of the canal empties into the Pacific instead of the Atlantic Ocean.

Considerable time was spent by the seven girls in the research into the vegetation of the Canal Zone, after which the covering of hills and vales with appropriate verdure was begun. For palm trees, *Equisetum* in vegetative state was found to be a fairly accurate substitute; madrona twigs served for rubber trees; several varieties of moss from the deep woods represented overhanging growths on the shore of Gatun Lake; grass tufts represented pineapple plantations.

The provision of real boats for towing through the locks, as well as actual means of towing, were highly fascinating problems. Several diminutive models of ocean liners were constructed painted with care and provided with anchor equipment. The "electric mules" of the Canal Zone were reluctantly omitted on account of the time and materials required for construction, and a simple towing device was used. Innumerable problems continually suggested themselves up to the very last day of the year, and it appeared that the daily discovery of new challenges like these made the interest increase constantly.

The initial demonstration was given to the pupils of the room only. Entirely without direction from the teacher, the four engineers apportioned the information which they had gathered or which had been given to them by other pupils, and presented it in four speeches. These covered the following topics: the history

of the canal; the geography of the Canal Zone; operation of the canal; and the passage of the locks. The girls took turns in describing the vegetation. The pupils had been accustomed to socialized recitations, and were consequently well practised in topical discussion. Any inaccurate statement from a speaker brought prompt correction at the conclusion of his speech.

The fame of the project, of course, grew, and other rooms made requests to be permitted to attend a demonstration. Finally, arrangements were for the entire school, group by group, to witness a demonstration of the fascinating project. Interest and pride in the achievement were intense."

No one can doubt that this was a valuable piece of work. The interest in the project was so intense that the teacher tells us the boys and girls were at work before eight o'clock in the morning and, on many an afternoon, were still busy at five o'clock, while many had actually to be sent home. It seems almost unbelievable that children should have been sent home from school because of overzealousness. It seems even more so when we know that formal lessons were to be prepared as usual and that any delinquency was to be made good regardless of whether due to over devotion to the project or not.

Such is the outcome of work when it is properly motivated and based on fundamental instincts. What an incredible amount of energy expended for the attainment of some worth while project! Here in this Panama Canal project the children actually saw the practical value of what they were doing. It is as J. K. VanDenberg says: "We must not be content with simply selecting and assigning school work which we as individuals

believe will make our pupils 'do better' the things they will do anyway' but we must never forget that until we have convinced our pupils that our assignments will have this ultimate value we have done only half our work as teachers. . . . We must make plain the usefulness of our subject."

The children here were actually engaged in a valuable constructive problem. They investigated facts, chose and rejected materials, always with the end of a completed and tangible production in view.

Next the project challenged the resourcefulness, originality, and ingenuity of the pupils. Here was a definite problem, the solution of which depended upon their abilities. The concrete situation appealed to their inventiveness and they worked with an unlimited eagerness. It challenged their curiosity and they were anxious to know the "why" of things.

Closely allied to the expression of one's ingenuity is the pride that comes from successful achievement . . . the feeling of self-satisfaction which is one of the most powerful driving forces in life. There was a desire for social approval which comes from having contributed something worth while and receiving praise from one's fellows. What happiness these youngsters must have experienced when they viewed the finished product! On a smaller scale these young builders experienced the same feelings that General Goethals himself felt when he viewed the mature fruits of his labors in the Canal Zone.

Finally, the project united the pupils in a community of effort which would have been impossible in any text book study of the problem. Everyone had a vital bit to contribute and at the same time everyone had in mind the problems

of everyone else. It was an excellent experiment in team work, and it furnished valuable training for future citizenship. One of the great problems to be learned in school life is how to co-operate with people and work together as a booster for some common end.

We see then that the success of this project was dependent upon several instinctive forms of response which it utilized, as for instance: the thirst for activity, the thirst to collect or amass, the desire to construct, the desire to investigate, and the craving for the companionship and stimulus of the group.

All the original equipment of instinctive thirsts, as we have said above, represent the great basic mainsprings of action and it is only when the educative process is based on such instinctive responses that we have pupils entering into their work wholeheartedly, and with unlimited enthusiasm.

At no time in the life of the pupil is such motivation as necessary as in the Junior High School period. Projects are being adapted to every grade of school

work, from the early elementary grades to advanced grades and college work, but it appears to me that at no time are they as essential as during adolescence, and at no time are they actually as popular. T. H. Briggs says: "It can be safely asserted that more project teaching may be found today in the Junior High School than in any higher institutions (except the graduate law school)." It is essential that the budding interests of the adolescent be awakened and directed. He is undergoing a great physical and mental change and he should be given the utmost care. Every effort should be made to make school work realistic and concrete to him. It must make an appeal to him, or his interests will lie dormant and he will have a desire to "Quit" as soon as he has reached the age limit. At no time is the mind of a human being more plastic and receptive and it is the ideal time to present not only manual but intellectual and emotional projects. The teacher should be on the alert to create project situations in every field.

The official announcements are out to the effect that the National Association of Secondary School Principals will be held at St. Louis, Missouri, February 24-26, 1927; the Superintendents' Division of the N. E. A., together with other allied associations, will be held at Dallas, Texas, February 27-March 4; and the North Central Association of Colleges and Secondary Schools will be held at Chicago, Illinois, March 17-19.

The Second Annual Meeting of the Association

BY GEORGE N. CARMAN,

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The meeting was held at the Lewis Institute, February 12 and 13, 1897; President Adams of the University of Wisconsin presiding. In his opening address President Adams said:

"There are two educational needs in this country of consummate importance. The first is the most general and the most thorough possible training of those who by their elevated professional positions are to be, and must be, the guides and leaders of public opinion; and the other is the great truth that the very highest service that the common schools can render is to teach the masses of the people how to recognize, how to choose and how to follow those who by a wise and comprehensive education have been fitted for leadership. Let us ever keep in mind the fact that this country was not founded and our institutions were not organized by the skill that comes from the common schools. It was great learning and great wisdom and great character that gave us the constitution and the marvelous organization of that government of which we are so justly proud. It is only by the same means that these benign institutions are to be perpetuated and strengthened; and it is because of this fact that whatever other necessities temporarily confront us, every grade of education from the lowest up to the highest must have the constant and unwearying support and encouragement of all the forces of the state and nation."

The executive committee submitted

four resolutions for discussion. The first resolution was:

"*Resolved*. That in the colleges, and especially in the larger universities, the tendency to intrust the freshmen class to inexperienced teachers, often inferior to those in the high schools, is a growing evil and ought to be checked; and that every college should provide for bringing the freshmen as far as possible under the inspiring and encouraging influence of the best teachers in the institution.

Principal French of Chicago introduced the discussion and was followed by Presidents Draper, Rogers, Canfield, Fisks, Harper, King, and Adams, Professor Beman, Principal Boltwood, and Superintendent Nightengale. The resolution as finally passed read:

"*Resolved*, That in our secondary schools, and schools of higher education, students in the first year, or freshman classes, should not be entrusted to inexperienced teachers; that where any distinction is necessary, such pupils even more than those in the higher classes should be brought under the inspiring and encouraging influence of the best teachers in the institution."

Professor James E. Russell of the University of Colorado opened the discussion of the second resolution, which reads as follows:

"*Resolved*, That in the opinion of this association the tendency to multiply the number of short courses of study in the secondary schools is injurious and ought to be reversed; that courses in secondary

schools should be the same for students who intend to go to college and for those who do not; and that the colleges and secondary schools represented in this association be and are hereby respectfully urged to co-operate for the furtherance of the ends sought in this resolution.

Following are quotations from Professor Russell's address:

"The question naturally arises, what are the main objects of the public high school? In answer it has been well said that its function is threefold: 'To equip pupils for the business of life, to give a proper training to those who will teach in the common schools, and to prepare for college.' As a public institution it can recognize no distinctions of class or sex; its doors are open to all who are qualified to enter. It exists for the public good, and merits public support only so long as it serves the common weal. As a school it is an educational institution, and should subserve the true ends of all education. This resolution, as I conceive it, hinges on the meaning of education and the worth of education to society.

"Education is a means to an end, not an end in itself. Popular disregard of this very patent distinction leads to endless confusion in the consideration of pedagogical matters. College authorities and the framers of school curricula, when they put a premium on the mere knowledge of subjects, are not wholly guiltless of promoting such misconceptions. State and society intensify the error when they permit considerations of civil and social rank to become identified with the completion of successive steps in the school curriculum. When intelligent people talk of getting their education at this or that institution, when our college students think more of passing

examinations and getting degrees than of their own mental development, it is little wonder that false ideas should arise, that the ends of education should become confounded with the means.

"It is characteristic of secondary education, which properly begins somewhere in the grammar school and runs even into the college course, that it is always a preparation for independent work, whether it be in domestic life, in the trades, in business, in the professions, or in the university. This preparation consists, in the first place, of the development of the various powers of the individual mind, the strengthening of the spiritual faculties in order that the student may attain his highest possibilities; in the second place it involves general culture, race-knowledge, which the individual shares with others of his class in proportion as he is able to apprehend and interpret it; a third element is a body of specialized knowledge directed to definite ends, tools suited to the work that is to be done.

"There are those, I well know, who, while proclaiming the gospel of formal discipline and assenting mildly to the proposition that general culture is a legitimate object of secondary school work, unhesitatingly relegate this business of making tools to trade and professional schools. The answer to such dogmatism is to be found in the fact that every step in the process of schooling from the learning of the alphabet and the multiplication table to the Greek grammar and calculus furnishes a tool with which to perform new tasks. If mental discipline were the sole object of instruction, why not teach the game of chess in place of geometry, or Chinese instead of Latin? The best studies are those which serve all three ends—those

studies which discipline, liberalize and energize the mind.

"It is obvious that the public high school, while aiming at mental discipline and general culture, must afford its pupils the means of doing that work which lies next to them. Hence the object of public school training, and in the long run the object of all education is not only to develop the various powers of the individual, but to enable him to co-operate with his fellows for the advancement of the common weal. Education is the development of the whole man—not merely of the intellectual side of him—for that complete life which is found only in society.

"If the position here taken is a tenable one it follows that the public high school should have more than a single course of study. Personal limitations, instincts and interests should be respected if the highest degree of mental development is to be attained; the needs of society should be regarded if the life work of the individual is to be made most effective. The curriculum should be elastic enough to satisfy individual requirements; broad enough to meet the demands of life. But life is no respecter of persons. One man merits as good preparations for his life work as another. The doctrine that all men are created equal, and that it is the business of the state to keep them so is as erroneous in pedagogy as in political economy. Men are not equal, to begin with, and they are certainly not all called upon to perform the same life tasks. Their school tasks, therefore, should be varied; perhaps no two pupils require exactly the same general course of study. But in one respect the instruction of all should be the same, that is, *in quality*. And it is the quality of school work

nowadays which needs especially to be improved. It is this fact which, as we understand it, is emphasized in the second part of this resolution.

"And, in conclusion, I wish to point out that the resolution calls upon this association to do something. It is our duty to strike, and strike home. But strike what? It is not uncommon for mortals to snap at the chain while disregarding the power that binds. We are accustomed to berate the stupidity of school boards and to deplore the low standard of public sentiment, but in my opinion we would better look farther for the main cause. The chiefest sinners are those august corporations known as colleges and universities, which, with Ptolemaic certitude that all the universe revolves about them as a center, persist in defining education in terms of language and literature and history and science and mathematics. Once secure from the universities the concession that any student who has a thorough secondary education will be permitted to pursue such advanced courses as he is qualified to enter, the hostility of school boards and the aversion of public sentiment will speedily disappear. Progress in educational reform waits on the day when the higher institutions will condescend to take a few lessons in modern psychology and modern sociology."

The resolution was further discussed by President Canfield and Principals Butts of Michigan, who reminded the association that:

"The ninety-eight teachers connected with the Committee of Ten were unanimous in their decision that 'every subject in the secondary curriculum should be taught in the same way and to the same extent to every pupil, regardless of his destination or the length of his school

course.'"

After thirty years, when Spanish seems to have largely displaced Latin, as well as French, German, and Greek, I am impressed with the importance of the contention of Chancellor MacLean:

"Can we not all agree that psychology demands a prominence be given to language? We dare not here anticipate the discussion of the association. But in taking up language I wish that we might all agree, though I do not expect unanimity, that Latin, to a certain extent what might be called a short course, should be required in all the courses in these schools. I am free to say that the experiment upon the prairies of Nebraska shows that we can get the indorsement of the superintendents and principals of that state for requiring Latin. This was not believed to be a possibility six years ago. It has found an efficient argument which appeals both to our boards and taxpayers. It is found to be cheaper to supply schools with good teachers in Latin than to supply schools with teachers in French or German. We have reached the point where people are willing to acknowledge that they cannot understand English without some knowledge of the Latin elements of English. They dimly appreciate what they sometimes call also the German element in

English. They dimly appreciate what you and I know, the inflected stage of our language, the old English stage. So they are willing to have something beyond English, and they find it practical to have that something Latin.

"Now let me take the step and say that Latin shall be the backbone of our linguistic work. I venture to say that if Nebraska can come up to this, certainly this middle West should be up."

After further discussion by Professor Coulter and Chamberlain, President Baker of Colorado and others, the second resolution was modified and passed as follows:

Resolved, That in the opinion of this association the introduction of short courses in many subjects for the same pupils in secondary schools is not pedagogical, and that the reverse plan ought to be adopted—fewer subjects, each adapted to the needs of the individual pupil and continued in every case at least one year; that instruction in secondary schools should be the same for students who intend to go to college and for those who do not; and that the colleges and secondary schools represented in this association be and are hereby respectfully urged to cooperate for the furtherance of the ends sought in this resolution.

Criticism of Present Day Educational Research

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At the outset, I should like to make it clearly known that I am in entire sympathy with those honest efforts in education which we call educational research, that I am, in fact, enthusiastic in advocating all attempts which may tend to acquaint us with the actual facts of our great educational enterprise, either of its administration or its actual educational functioning. So much do I recognize the worthwhileness of this rather new attack upon the solution of our educational problems that I am not willing to permit it to degenerate into a mere superficial, fussing around with insignificant, detached, unimportant details. There is a real danger that such a deterioration of the whole movement may result. The only check or prevention consists in having those connected with the movement assume a sincere, self-critical attitude. It is far better that criticism should come from within the profession, from sympathetic and comprehending sources than that, by silently permitting further deterioration, we give an opportunity for unsympathetic and uncomprehending criticism from without the profession.

Most of the work in educational research is done in graduate schools of university colleges and schools of education. There it is largely carried on by graduate students working for the doctor's degree and is supervised by some professor, or committee of professors, of education. Generally the problem is some small aspect of a much larger prob-

lem which interests the professor, known as the major adviser. The graduate student is very happy to get hold of this fractional part of a problem, although it may not be along the line of his general interests, nor anything which he would ever dream of doing, if left to his own choosing. He is glad to do this work because it is a means of overcoming a necessary obstacle in the way of the coveted Ph.D., and because the professor's personal interest in the partial problem assures some degree of assistance, and constitutes a mild guarantee that he will see to it that the study will be accepted by the graduate committee. Herein consists a real menace to the future of educational research. There is a vast difference between working out some small detail after one has made an attack upon a real significant problem and finds that the working out of such a detail is essential, and the working out of a rather insignificant problem because it has been suggested by some one as a feasible project for a dissertation which can be completed within a year's time. Since the latter is generally the attack of the graduate student, the danger lies in this, that he form the opinion that genuine and orthodox research consists in undertaking unrelated and insignificant problems. The outcome may be that the next generation of educational researchers will be one of visionless minutia-men, — educational microscopists. The remedy which we would suggest is to let the graduate student attack large

problems, permitting him to discover the necessity of working out certain details, and finally agreeing to confer upon him the desired degree when he has given evidence of proper research ability and enthusiasm, even though his major problem may as yet not have been completed. He would then leave the graduate school, not only with a better knowledge of, and attitude toward research, but also already launched upon a large research enterprise which he would pursue vigorously because of an inherent interest in the matter.

That what has been stated is not mere fiction is evidenced by the fact that even now study after study appears which claims no other virtue than being a beginning. After going through the regular, stereotyped form, the conclusions finally reached are generally to the effect that "It would seem, etc.," or "It appears, etc.," or "As far as we were able to proceed, we may conclude," or "While further researches are essential, we may say that our evidence points in the direction of, etc." With these suspended conclusions the subject is dropped. Another investigator cannot go on with the problem for he must do something *new*, something *original*, probably better, something *unheard of*, unless he be advised of the fact that in all probabilities the first student was in error. In this case, he can take the same subject with impunity, provided that his conclusions seem to indicate that the first man was absolutely wrong, even as the major adviser had suspected. To complete, to substantiate the original study would be criminal. Yet, I doubt if at the present there exists any greater need than that of doing over, checking upon, and verifying studies already made.

Again, it seems to me that investigat-

ors are deliberately shying away from real significant educational problems, on the grounds that they are too large for research efforts. The teacher, however, must meet problems as they come, large and small. For her there is no escape; she has not the privilege of selecting little ones that can be worked out within a few months. If these problems must be met by the real worker in the educational field, they should constitute a challenge to the research student as legitimate territory for his explorations.

In research, methods and technic, great improvements need to be made also. Many graduate students acquire all of their knowledge of research while they are working out their final dissertation problems. One would suppose that they should have this technic well developed before they attempt such an enterprise. This, however, is not so. The graduate student usually finds it necessary to carry every little detail of research technic to his adviser. Then, after completing his year's work, he finds himself in fairly good control of one technic. At the present time, this is usually some measurement attack, although for many of the problems undertaken, probably for most of them, an experimental approach would be the more appropriate one. Very often, too, his general training is as defective as his knowledge of research technic. The lack of a working knowledge of educational psychology, the lack of comprehension of the particular field in which he is working may lead the investigator into a great many unnecessary analyses, productive of conclusions which one of greater information could have reached without the elaborate research efforts that were put forth. It is this kind of thing that makes scholars outside of the field of education so critical

of, or shall I even go farther and say so readily annoyed by what we call educational research. When, for example, a man sets out to study some problem connected with the teaching of mathematics, having only a mediocre mastery of that science, and lacking rather seriously in knowledge of psychology, and possessing only a superficial and mechanical control of research technic, his study cannot help but be grossly defective, and his conclusions of the most obvious nature.

Another just criticism is the fact that practically all of our researches are too hurried. This means generally a very poor selection and preliminary analysis of the problem. The result is that very important factors are overlooked, or are thought to be present in pure form, when they are probably so involved and conditioned, that only a prolonged and careful study can reveal their actual efficacy, or significance. To overcome this defect, the immature research worker takes refuge in a fairly elaborate statistical treatment of the invalid data which he has collected. There is, in fact, entirely too much satisfaction with the treatment of obtained data, rather than with the validity of the methods by which they are collected. And even in the statistical treatment of results, when one succeeds fairly well in unravelling these mysteries, he discovers in most instances, a painful disregard of the assumptions which make even these procedures valid. Our haste to bring a study to a conclusion, to get it into print before some other individual will present his manuscript, is a major cause of many of our unscientific studies.

Apropos the discussion of the foregoing paragraph, it may not be out of place to call attention to the fact that many a research worker never clearly

classifies his study. There are several rather well defined lines of educational research, and one works probably most successfully when he is conscious of the particular type of research which he is doing. We have, first of all, the pure research, which is engaged in for the sake of satisfying a somewhat playful curiosity. We need vastly more of this kind of work. In the physical and natural sciences, it is this type of research which has probably led to the greatest number of significant discoveries. Such efforts require leisure and carefreeness, and can most surely be spoiled by the unwise insistence upon immediate and practical results. We have also the research which is of a highly technical nature, which generally results in the creating of new research devices. This work is of the greatest significance, but can be engaged in profitably only by a rather limited number. It requires a certain mental set and a high capacity for handling abstractions, generally of a mathematical nature. Then there are the research studies in which we apply these research instruments to the investigation of pedagogical or schoolroom problems. This type also demands a certain definite attitude, and is not successfully engaged in by all. It requires a true teacher's view-point, and anyone who is an outright failure as a teacher may hardly hope to succeed well in this type of research enterprise. Now, the marvel of it all is that many a study is reported as worthy of recognition because of the achievement of some trivial research device, when it fits much more readily into this last class. One is often impressed with the fact that the student, while working, was never quite decided as to what line of contribution he really should make. Were it not unprofessional, one

should call attention to the humor of the situation of the student who thinking that he had discovered some new formula, or at least a modification of an older procedure, slaves for a whole year to find enough material in which to dress it up so that he may report a study approximating in number of words the unwritten standard set for Ph.D. candidates, only to find that his formula is almost overlooked, but that his study is accepted because of the excellence of the *packing*, the *trimmings*. In that case, the action of the committee may be perfectly correct; the student simply had failed utterly to recognize his own peculiar capacities, and had evaluated the various parts of his contribution on the basis of some highly artificial standard.

Last of all, we should call attention to the fact that when a new movement gets under way, the originators are generally men of ability and exceptional scholarship. Soon a host of admirers and followers begin to imitate. These generally are of mediocre caliber. The outcome is that the movement, just as it gathers proper momentum, becomes heavily loaded with needless ballast, which impedes its progress. The great leaders in educational research have made an energetic beginning. Many and many an ambitious individual would do vastly better to assist in some enterprise rather than become the source of criticism and hinderance, by playing the part of an inefficient imitator.

The annual dues from Association members are now payable. They are: for Institutions of Higher Learning, \$25.00; for Secondary Schools, \$5.00. Checks should be sent to Treasurer, W. I. Early, Sioux Falls, S. D.

Reclassification Procedure in Indianapolis

Principal M. H. Stuart and his staff of teachers in the Arsenal Technical High Schools, Indianapolis, Indiana, have worked out a plan for reclassifying pupils in a manner that merits the attention of other cities. In a four page circular Mr. Stuart describes the plan and outlines the procedure of administering it. The work during the current semester covers 17 sections in English, 20 in mathematics, 6 in social science, 9 in science, 2 in commercial subjects, 3 in mechanical drawing, 12 in metal crafts and 8 in building crafts.

Mr. Stuart states the purposes of the plan in the following words:

"A Plan of the Arsenal Technical Schools Which Enables Pupils Becoming Irregular During the Semester to Re-establish Themselves Without Further Loss of Time.

"The compulsory attendance law and the universal assumption that pupils should have a high school education place upon the modern high school certain demands that require new forms of organization to meet the needs of all types of pupils. The following program and schedule indicate the opportunities that are extended to pupils who, because of failure, absence, late entry, sickness, etc., become unclassified at any time during the semester. The sole purpose of this department is to restore to normal classification pupils who have become irregular. By thus keeping credit possibility before students, they are encouraged at all times to do their best."

Following the introductory statements, the circular gives the schedules for the various sections of classwork mentioned

above. These schedules are not reproduced here, but the various footnotes attached to the schedule are reproduced. They are:

I.—English.

The above special classes in English were formed at the beginning of the semester for those pupils whose past record in English indicated that they needed special consideration both as to time and form of instruction. These classes meet for a double period and the work is conducted on an individual lesson sheet basis. To all of these classes additions may be made at any time during the semester with credit objective, provided the number of hours given to the subject daily compensates for late entry.

II.—Mathematics.

Mathematics is organized and administered on the same basis as English.

III.—Social Science.

Classes in Civics are formed as needed. Classes in Current Affairs are organized on a class basis at the middle of the semester. Pupils who should be removed from two or more classes because of failure may be transferred to this subject, in which, by devoting double time thereto, they may make a credit by the close of the semester.

IV.—Science.

Selections in Science are formed as needed become apparent.

V.—Commercial.

These are laboratory courses including all elementary commercial processes except stenography and bookkeeping. On the one hand, they are designed to give definite office value to the pupil who finds it necessary to withdraw from

school in a short time. On the other hand, they are maintained to serve as prevocational training for pupils with higher commercial aims. The nature of the subject and method of instruction admit of entrance at any time.

VI.—Mechanical Drawing.

Pupils are admitted at any time for as many periods as the reduction of their daily load, because of failure, may warrant.

VII.—Metal Crafts. (Machine Shop, Sheet Metal, Foundry, Pattern Making, Forging, Auto Repair).

The above are vocational finding classes rotating in sections with a different unit of subject matter for each. Pupils may be admitted at the beginning of any unit of work during the semester. Due to the number of divisions a pupil may even enter two or more different units, thereby compensating for late entry.

VIII.—Building Crafts. (Wood and Metal Finishing, Plumbing, Cabinet Making, Carpentry, Mill Work).

Building Crafts is organized and administered on the same basis as Metal Crafts.

Then follows an account of "The Relation of the Reclassification Department to the School as a Whole." Here we quote in full:

"Transfers between the Reclassification Department and regular classes may be made at any time the pupil's standing warrants; in the main, however, transfers are made after each advanced grade report. The initial enrollment in the Reclassification Department for each semester is made up of those pupils who, having failed the preceding semester, are most in need of special attention. The greater number of such students

can well be transferred to regular classes at the end of the first grade period, thereby making room for others who may have lost their classification through absence, sickness, or inability. This plan makes the enrollment of the Reclassification Department somewhat constant throughout the semester, thereby using advantageously the quarters set aside and the teachers designated for this work. Since the regular teacher is relieved of some of the more difficult individual cases, it is possible to increase the regular class size enough to compensate for any extra teacher-time spent in the Reclassification Department.

"It is clearly evident that this program might be greatly extended and perhaps would be enriched considerably thereby. The program relates mainly, however, to the younger high school pupils who are within the compulsory school age. For such the plan needs only to afford a sufficient number of opportunities to take the free time of a given pupil to the extent that his program has been readjusted on account of failure.

"The modern high school has not done its part by the community until it has established a program of work and an atmosphere of encouragement which will make the efforts of the home and welfare agencies lastingly effective. Any plan of coordination with an attendance department must include a scheme which will hold the pupil's interest once the attendance department has brought him to the school. It is the purpose of this program to establish such conditions that no pupil will have occasion to lose heart because of adverse circumstances."

Here surely is good philosophy and good wisdom in carrying it into effect.

(C. O. D.)

A Statement from the New Commission on Equity in Teacher Placement

Cases are sometimes brought to the attention of instructors in departments or schools of education which involve conflict between teachers and teachers' agencies. On the one hand, the teacher sometimes believes that the agency claims a fee when it has not performed services which warrant such a claim. In another type of case a university or college appointment bureau may have notified the candidate before the teachers' agency knew of the vacancy and yet the teachers' agency claims the full service fee. On the other hand a teachers' agency sometimes feels that a teacher has broken his contract with it.

Complaints originating in these and other types of cases are frequent enough, in the opinion of the members of the National Society of College Teachers of Education, to warrant the appointment of a commission to investigate and report upon them. Such a commission was authorized at the last annual meeting of the society and the president appointed the undersigned members of the commission.

The Commission conceives its function to be: First, to receive complaints concerning alleged unfair treatment on the part of a teachers' agency from teachers, supervisors, principals, superintendents or other school officers, or complaints from teachers' agencies concerning alleged violation of contracts by teachers; Second, to investigate such complaints and to ascertain the facts by obtaining statements from parties to the controversy or from other first hand observers; Third, if possible to formulate an opinion on the equity of the case in the light of professional ethics; and Fourth, to report

the findings to the National Society with a view to their publication.

The Commission also hopes to engage in supplementary investigations for the purpose of ascertaining the general facts about teacher placement, arriving at principles which may be agreed upon by all concerned and disseminating information on these general facts and principles.

The National Association of Teachers' Agencies has already taken the initiative in promoting just dealing between teachers and agencies by adopting a code of ethics. The Commission will seek the co-operation of this Association in arriving at a set of principles upon which both can agree. Some correspondence has already passed between the two groups. The Commission will try, in dealing with individual cases, to base its judgment on general principles which are agreed to both by the National Association of Teachers' Agencies and by the Commission.

The undersigned members of the Commission on the Equity of Teacher Placement are prepared to receive and investigate complaints by teachers or other school officers, or by teachers' agencies, regarding alleged unfair treatment.

Correspondence may be addressed to the Chairman or to any of the other members of the Commission. A blank will then be sent upon which a formal statement may be made.

Signed:

J. B. Edmonson, School of Education, University of Michigan,
J. W. Withers, School of Education, New York University,
Frank. N. Freeman, Chairman, University of Chicago.